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ABSTRACT

A two-volume resource book addresses the particular needs of English as a Second Language (ESL), English language center, and transitional skills teachers. The volumes are designed to help meet the language and educational needs of ESL students in British Columbia. Volume I provides a framework for the design of language instruction as part of subject area lessons. It illustrates the use of the framework by including lessons from a wide range of subject areas, including social studies, mathematics, consumer education, foods and nutrition, science, writing, and art. Topics covered include: (1) thinking skills (e.g., taxonomy of skills, cause and effect reasoning, and thought and language); and (2) language skills (e.g., particular styles, processing of discourse, language structure to express thinking processes, and special vocabulary). Extensive examples are given. Contains approximately 70 references. (LB)

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ESL

Resource Book

Volume I

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INTEGRATING
LANGUAGE AND CONTENT
INSTRUCTION
K-12
AN E.S.L. RESOURCE BOOK
VOLUME I

Province of British Columbia
Ministry of Education
MODERN LANGUAGES SERVICES BRANCH
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THEORETICAL FRAMEWORK
AND
SAMPLE LESSONS

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Dr. Bernard A. Mohan of the Advisory Committee played a major role in the development of this material. His publications contributed ideas fundamental to the framework as did his intensive and extensive collaboration with the writing team.

The lessons contributed to the Resource Book were field tested under the direction of Dr. Carol Thew and Patricia Wakefield and then extensively revised by them incorporating suggestions from classroom teachers and students.

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FOREWORD - AUDIENCE

This resource book produced in two volumes is addressed primarily to English as a Second Language, English Language Centre, and transitional skills teachers. However, regular classroom teachers are also invited to consider these volumes for the reasons given below.

Mastery of a second language in all its dimensions takes many years. The population of E.S.L. students who exhibit varying degrees of English proficiency is extremely large in the British Columbia school system. Consequently, regular classroom teachers encounter students at the transitional stages of language development and have the responsibility for helping them to continue to develop fluency as well as literacy in the second language, and academic skills.

The two volumes commissioned by the Ministry of Education are thus designed to help all teachers throughout the school system as they plan to meet the language and educational needs of their English as a second language students.

Volume I provides a framework for designing language instruction as part of subject area lessons.

It illustrates the use of the framework by including lessons from a wide range of subject areas, namely, social studies, mathematics, consumer education, foods and nutrition, science, writing and art.

Volume II also includes a large section of resources useful for integrating language and content instruction in all subject areas, Kindergarten through Grade 12. The resources are coded as to their suitability for primary, intermediate, secondary and multi-grade levels, and for language level as well.

"The interactive process between language and learning indicates that language in all its dimensions is an integral part of school learning."

Elementary Language Arts Curriculum Guide, Alberta Education, 1978:30.

"...the position taken in this text (Teaching Reading in Content Areas) is that the curriculum content in each of the subject areas should be the organizing element for the reading instruction. It is the set of concepts that comprise the curriculum and it is the information imbedded in those concepts that the student should master.

Having established the importance of the curriculum, the reading instruction is then based on the principle that 'content determines process'."

Harold L. Herber. Teaching Reading in Content Areas, second edition. Englewood Cliffs, New Jersey: Prentice-Hall, 1978:4.

SECTION I

THE FRAMEWORK

INTRODUCTION

NEED

Recent Canadian research (Cummins 1980, 1982) indicates that it takes several years for E.S.L. students to reach a level of proficiency in English comparable to that of native speakers of the same age.

This research contains major implications for the schooling of children who do not speak English.

It now must be acknowledged that the second language acquisition process takes time: expecting quick and full-fledged competence is unrealistic. Moreover, the process, like the first language acquisition process is developmental in nature and involves different types of language proficiency.

The ideas of Cummins (1982b) provide a useful starting point for delineating types of language proficiency. Cummins distinguishes two kinds of language proficiency: social communicative and academic communicative proficiency.

In Cummins' descriptions, social communicative proficiency involves the ability to interact socially and affectively in face-to-face situations. Because face-to-face communication is embedded in a context, the language used is rich in cues which aid comprehension: people use intonation and gestures, express feelings, and refer to present physical objects and events. The language is personal.

The Canadian research has found that immigrant children develop the language of social communication in about two years of experience in an English-speaking environment (Cummins 1980b; 1982a & b). Although this social communicative ability is crucial for the immigrant children's adjustment and social relations, it does not inevitably lead to success in the academic focus of the school.

Learners also need to develop academic communicative proficiency, that is, to develop a command of the language of instruction which tends to be context-reduced, impersonal, formal, abstract, and related to cognition and concepts. The language of instruction is thus difficult to understand.

E.S.L. students may require as many as five to seven years to reach the academic communicative proficiency level of their English-speaking peer groups (Cummins 1980a).

Learning a second language well is a very demanding and prolonged task.

In British Columbia, trained E.S.L. teachers adequately and efficiently handle the beginning stages where E.S.L. students acquire 'social/survival' English. Good commercial materials exist for the early stages. Recognition of the importance of this beginning stage by the Ministry and by school administrators has led to the creation of supportive programs where survival English is learned relatively quickly.*

Once students are beyond the beginning stages, however, they need to use language to think and to learn. They need assistance in accessing the regular curriculum, which is an extremely complex task for the teacher to organize and the second language students to undergo.

For some time now, E.S.L. teachers in the field have recognized the need to make the regular curriculum accessible and have been working towards this end. While the students are ready to continue developing their knowledge, they are faced with the difficult task of reformulating concepts developed within the context of their first language and culture. To accomplish this task and to bridge the gap from beginning acquisition to full linguistic proficiency, they need a carefully articulated program.

E.S.L. students also need to be relieved of the stigma of a remedial approach; this can be partially accomplished by allowing them to participate in regular subject areas at their own intellectual level.

*Resources provided by the British Columbia Ministry of Education include a kit entitled Living and Learning in a Second Language which consists of the following materials:

-English as a Second Language/Dialect Resource Book K-12,

-a 30-minute videotape It's a Small World,

-and a handbook for teacher inservice.

These materials are available from the Provincial Curriculum Resource Centre or from any school district resource centre.

PURPOSE

The British Columbia Ministry of Education produces various types of publications to assist teachers. Two major types of publications are curriculum guides and resource books.

Curriculum guides set forth goals and learning outcomes that are to be aimed for in British Columbia schools and some guides also offer teaching strategies. Resource books, on the other hand, do not typically contain goals or learning outcomes. They offer assistance regarding planning, teaching methods, materials and various concerns that might arise in the teaching of a specific subject.

This two-volume publication is not an E.S.L. curriculum guide. It offers a framework, sample lessons, and suggested resources to help teachers in their endeavours to move their students beyond a use of English which revolves around basic interpersonal communicative skills towards a use of English which is required in less personal social situations. It intends to have students use English to learn, that is, to use English for cognitive and academic purposes.

The expression academic purposes is meant to be interpreted here as being synonymous with the expression learning purposes. The approach being recommended is not reserved exclusively for students on a university preparation, academic program in the secondary schools.

The approach is deemed to be viable for students in a variety of programs in the school system. The only requisite is that the program expects the students to think and to learn in English.

The resource sections in Volume II are organized under several categories: language arts/English, social studies, science, computer science, mathematics, art, music and drama, physical education, health, nutrition, home economics, consumer education, business education, industrial education, career preparation, and agriculture.

These categories point out the scope of the approach.

APPROACH

This publication outlines a cross-curriculum approach that the Ministry thinks may be of assistance in teaching English to non-native speakers K - 12. Its approach is practical: to select content goals and outcomes from the regular curriculum guides and to adapt the topics, materials and methods for E.S.L. students. The factors which determine the choice of content goals and outcomes would include the students' age, previous educational experiences and academic and educational needs.

This publication must be used in conjunction with existing curriculum guides. It provides teachers with a way of relating content goals and responsible concerns for second language learners' educational interests, which include their language interests.

Using the approach outlined here also allows teachers to create a unified course of studies with a strong cognitive foundation for E.S.L. students. This approach has multiple opportunities for practising language functions and structures in natural situations. Extreme behaviouristic approaches to language learning with drills and repetitions then become unnecessary.

BACKGROUND

This framework for teaching language through the regular curriculum grows out of English language curriculum policies which recognize the important role that language plays in learning across the curriculum, across all subject areas (Barnes, Britton & Rosen 1969; Barnes 1976; Martin et al. 1976; Language Across the Curriculum, Ontario Ministry of Education 1978 and Hamilton Board of Education 1980).

This framework as well builds upon the notional/functional syllabus established by the Council of Europe (van Ek 1977)* for foreign language teaching. The European syllabus marks a radical departure from the grammar/structure approach to second language curriculum design: it begins with notions and language functions rather than language structure.

*The British Columbia Ministry of Education English as a Second Language for Adults: A Curriculum Guide is based on the Council of Europe syllabus model.

Notions refer to linguistic items, and functions refer to the purposes of language. Notions are presented in general semantic categories such as time, space, motion, and case, and in specific notions such as personal identification, house and home, relations with other people, travel and education.

Functions include giving and receiving factual information; expressing and finding out opinions, likes and dislikes; and socializing, such as expressing gratitude.

Objectives link functions and notions for given situations and roles. The objectives specify what the learners will actually have to do with language and the linguistic details they need to master.

The Council of Europe notional/functional approach concentrates on the oral communicative skills needed to survive in a foreign country, and as such develops Cummins' social communicative proficiency to a threshold level.

But the notional/functional type of syllabus and this framework differ in aims and in philosophy.

This framework aims to develop competence in the language required in content instruction and includes advanced instruction in literacy. Its orientation is cognitive rather than social; it emphasizes study skills practice rather than the nuances of social interaction.

It is worth noting, however, that while the explicit focus of this framework is the use of language for cognitive and academic purposes, the use of language for social purposes is developed implicitly during the conduct of classrooms and during various kinds of communicative activities such as peer tutoring and small group interaction.

A simple example will show the direction taken by the approach described here.

Scope Stage 2 is a textbook for E.S.L. students in public schools. It describes an activity where students perform sinking and floating experiments with a bowl of water and objects such as corks and coins (Scope Stage 2, Teacher's Book 1972: 179). E.S.L. students observe which objects sink or float, hypothesize about whether objects found in the classroom will sink or float, test their hypotheses, and discuss explanations, coming to understand that what is important is the relationship between the size and weight of the object and the density of the water it is sinking or floating in.

In this example, the students are not performing repetitious drills on language structures. Instead, working with real content materials, they are actively engaged in experiences which provide a non-verbal context for language use. And they are learning to interpret these experiences.

But the main aim of this type of activity is not just to provide communicative practice for students, or merely to do a simple science experiment: the aim is much more far-reaching. The aim is to develop the students' cognitive language so that they can use English for learning across the curriculum.

The challenge for the teacher is to use this activity to develop the language of hypothesis and explanation, and to help students transfer this ability to other areas of the curriculum. The experiment provides natural opportunities--which the teacher must capitalize on--for students to talk and write about their hypotheses and explanations.

This curriculum framework and sample lessons show where hypotheses and explanation occur in other areas of the curriculum and thus how this ability can be transferred to other topics and subject areas.

OVERVIEW OF THE FRAMEWORK

This language through the curriculum framework can also be described as a language/content approach; language skills are developed as content is learned. This approach is recommended for those students who have developed some social communicative skills in English.

The basic approach of the language/content model is to structure content into lessons or units which predictably give rise to certain language functions and thinking processes. Language functions are predetermined but linguistic expressions are not. So there is a balance between control and free choice.

The lessons are presented in a visual context, thus providing students with direct access to the subject matter without linguistic overload. The visual context may be situational or pictorial.

The visual context may be established by referring to the parts and wholes of objects and models, by demonstrating actions, or by exploiting graphic aids. The visual context is examined in three stages: observing, sequencing, and decision-making. Teachers affect the students' thinking and language development at each stage by the types and sequences of questions that they ask. If the content is packaged in a film strip, the students can be asked to observe and describe each frame in their own words, follow the sequence of action of the frames, and then make judgements about the sequence. At each stage, the students are active, controlling participants in the learning process.

The language/content model in this document is entitled "E.S.L. Framework for Integrating Language and Content Instruction". Schematized in Diagram 1, the framework identifies the essential components to be considered when planning lessons and units.

The framework focuses on the study of the CONTENT of various subject areas but it also ties together the concurrent development of LANGUAGE and THINKING skills.

Necessary parts of the framework are actual EXPERIENCES and 'KEY VISUALS' which minimize the language gaps that hinder students from studying important content areas. KEY VISUALS such as maps and charts convey the CONTENT to be learned.

The framework parts are explained in detail and illustrated with more diagrams beginning on page 16.

Following is the philosophy or rationale from which the framework has evolved.

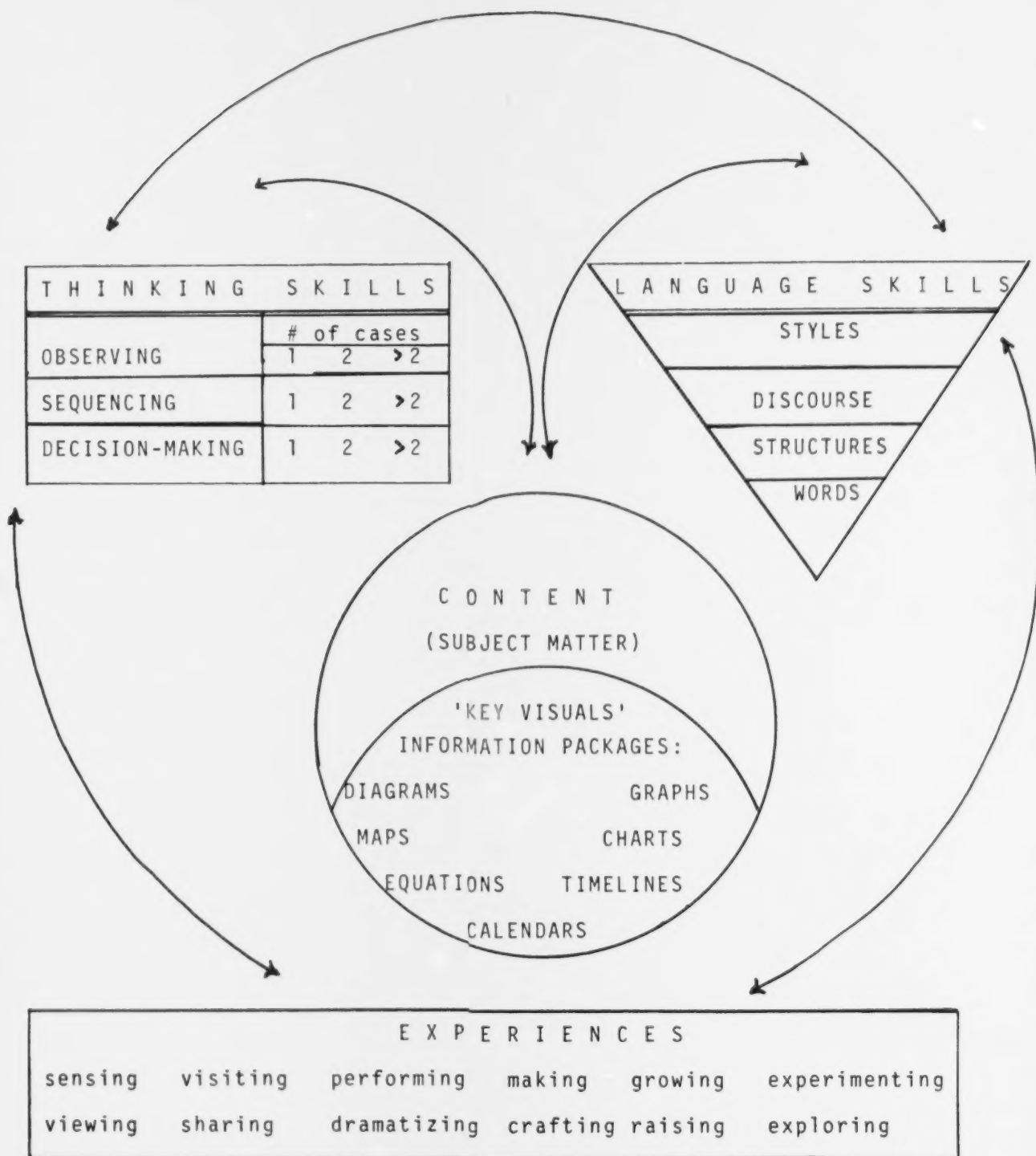


Diagram 1
E.S.L. FRAMEWORK FOR
INTEGRATING LANGUAGE AND CONTENT INSTRUCTION

RATIONALE OF THE FRAMEWORK: SIX PRINCIPLES

The design of the framework gradually evolved from surveying and thinking about the extensive research in first and second language development, the ideas of Bernard A. Mohan (1979, 1982, 1985) and the goals, objectives and outcomes cited in British Columbia curriculum guides in all subject areas.

The rationale for the framework is based on the following six principles:

1. Language is learned through meaningful experiences in social contexts.

Experiences are essential for realizing concepts and making sense of language. The clues provided in the context help to make clear the information in the verbal message. Provision of a variety of social contexts helps the student practise a repertoire of language styles, ranging from the informal to the formal.

2. Students' cognitive and academic growth should continue while the second language is developing.

By sorting, classifying, selecting and organizing ideas, and expressing them, students develop cognitive and language skills simultaneously. In the terms of Barnes, Britton, and Rosen, "Language puts the intelligence of the individual at his own disposal" (1969: 126).

3. Thinking skills are interdependent with language and content, and are common to all subject areas.

Table I on pages 12 and 13 drawn from a sample of school curricula objectives for kindergarten, social studies, science, and commercially available E.S.L. texts illustrates the commonality of these thinking skills.

Wording is based as much as possible on that of the original documents. These thinking skills derive in part from the taxonomy outlined in Bloom's handbook of educational objectives in the cognitive domain (1956) and Bruner's work on cognition (1960, 1973, 1975). They have been re-categorized according to Mohan's discourse schema (1979, 1985) and lined up to show their similarity and recurrence across mainstream and E.S.L. curricula.

Random surveys of other curricula areas would reveal the appearance of the same core thinking skills. Hence there is the possibility of a unified curriculum for all school subjects. This possibility becomes manifest in Column 5 of Table 1. The E.S.L. taxonomy of thinking skills is based on a rationale explained on pages 25 to 28 and is also obviously derived from the cognitive objectives of the regular curricula.

TABLE I SOME CORE THINKING SKILLS COMMON ACROSS CURRICULA

KINDERGARTEN	SOCIAL STUDIES Grades 1-7, 8-11 Elementary and Secondary
1. observe	observe, recognize
2. identify	identify
3. label	name
4. describe	describe, <u>locate</u> ¹
5. note similarities (compare)	compare (note similarities)
6. and differences	distinguish (and differences)
7. model, pattern, represent	use models
8. judge equivalence, count	note numbers
9. develop concept of space	<u>interpret direction, scale & distance</u>
10. explain	
11. classify	<u>organize information, construct graphs</u>
12. define	define
13. generalize	understand generalizations (states)
14. analyze	analyze
15. develop concept of time	<u>understand time and chronology</u>
16. sequence, seriate	<u>arrange events in sequence</u>
17.	
18. follow directions	plan procedures
19.	note changes over time
20. relate causes and effects	relate causes and effects
21. experiment	
22. predict, anticipate, estimate	test priorities and their consequences
23. project, imagine	think about changes if.....
24. wonder	establish hypothesis
25. interpret	<u>interpret</u>
26. note relationships	understand generalizations (causes, influences, motives, reasons, contributions, responses, results, effects)
27.	
28. state needs, wants	agree, disagree
29. decide, select	<u>decision-making</u>
30. solve problems	<u>problem-solving</u>
31. criticize	identify problems
32. plan	identify alternative solutions
33. infer	infer
34.	draw conclusions
35.	inquire (policy questions)
36. justify	
37. evaluate	evaluate
38.	

¹Underlined skills are major categories in the social studies "Skills through the Grades" charts. The complete list of skills is selected from the content, understandings, inquiries and skills sections of the Social Studies Curriculum Guides published by the British Columbia Ministry of Education.

TABLE I SOME CORE THINKING SKILLS COMMON ACROSS CURRICULA (Continued)

SCIENCE Grades 1-7, 8-10 Elementary & Jr. Secondary	E.S.L. TEXTS ²	E.S.L. FRAMEWORK
1. observing		OBSERVING
2. identifying variables		identifying
3.		labelling
4.		describing
5. comparing	description	comparing
6. contrasting	comparison	contrasting
7. formulating models	contrast	forming analogies
8. quantifying	analogy	measuring
9.		ordering spatially
10. communicating ³	spatial order	
11. classifying	classification	classifying
12. defining operationally	definition	defining
13.	generalization	generalizing
14.		(descriptive)
15.		SEQUENCING
16.	chronological	ordering chronolog-
17.	order	ically/narrating
18. carrying out procedures		following
19.		instructions
20.		noting a process
21. experimenting	cycles, chain	relating causes &
22. predicting	reactions	effects
23. understanding probability ⁴	cause & effect	
24. formulating hypotheses		
25. interpreting data	predicting	predicting
26.		
27.	hypothesis	hypothesizing
	interpreting	
	generalization	formulating
		principles
		formulating
		theories
28.		DECISION-MAKING
29. apply, transfer knowledge	personal opinions/	forming personal
30. solve problems	refutations	opinions
31. recognize problems, issues		making decisions
32. develop alternate solutions		solving problems
33. infer	proposals	detecting problems
34.	inference	proposing alter-
35.		natives
36.		concluding
37. evaluate evidence	discussion	forming policy
38.	advice	evaluating
		recommending

²E.S.L. texts by Mary S. Lawrence: *Writing as a Thinking Process* (1972) and *Reading, Thinking, Writing A Text for Students of English as a Second Language* (1975).

³Via various media.

⁴An advanced skill.

RATIONALE OF THE FRAMEWORK: SIX PRINCIPLES (Continued)

The E.S.L. taxonomy selects particular skills such as classifying, relating causes and effects, and recommending, and omits global skills such as explaining, organizing information, communicating, experimenting, interpreting, and discussing.

4. Key visuals such as diagrams, graphs and timelines are essential elements in bridging the gap between thinking, content, and language.

Key visuals package information. As pictures, they are skeletal ways of showing the cognitive structures underlying content. A timeline, for example, shows a sequence of historical events according to dates or eras. Sequence is one example of a cognitive structure.

When content and language are new, key visuals can activate the mind and make the information partially understandable.

Key visuals are useful organizers: language activities and entire content units can be developed from them.

5. E.S.L. students have developed a range of thinking and language skills commensurate with their chronological age but based upon their experiences in another language and culture.

The background and abilities that E.S.L. students bring with them provide the foundations for learning in a new language and deserve to be valued. The degree to which cognitive and linguistic skills have already developed in a first language influences the degree of attainment in a second language because it affects what can be transferred to the learning tasks. This transfer is important.

The task for teachers and E.S.L. students then is to connect the experiences, knowledge and skills already there with the new subject matter knowledge being explored and with the communication skills developing in the new language.

The task is often complicated by conflict of values, by attitudes derived from differing world views, and by negative self-concepts resulting from frustration.

But these complications can be reduced. Recent research supports the controversial position that maintaining a first language rather than replacing it, advancing its development to more sophisticated levels, and valuing its presence and functions are factors which positively influence successful growth in second languages (Cummins 1981, 1983, 1984). The factors interact across both the cognitive and affective realms.

RATIONALE OF THE FRAMEWORK: SIX PRINCIPLES (Continued)

6. Efficient instruction aims to meet several objectives concurrently. Efficient language instruction integrates the building up of subject matter knowledge, thinking and language skills.

Evidence to support the value and motivating force of instructional integration is found in the French Immersion Programs, where a range of subjects is taught through French. Swain's (1974) findings indicate that students learning French as a second language through the subject areas achieve a higher level of French than those following traditional programs where the concentration is primarily on linguistic form.

The parts of the framework for integrating language and regular curricula instruction are now discussed in this order:

1. experiences,
2. content,
3. key visuals,
4. thinking skills, and
5. language skills.

THE FRAMEWORK PARTS EXPLAINED

EXPERIENCES

Experiences are valuable for their concreteness: learners observe, do something, and live through situations.

Experiences build the foundations for concept formation and for breaking into the linguistic code itself. Because experiences are full of clues which clarify the meanings which are expressed verbally, experiences make the linguistic system accessible.

Experiences are also necessary to establish the connections between social situations and appropriate language use.

Table II lists several types of experiences suitable for giving language learning a real life context. Sensing, viewing, visiting, sharing, performing, dramatizing, making, crafting, growing, raising, creating, and experimenting share similar features, so strict distinctions between these types of experiences are not essential for this language/content approach.

TABLE II TYPES OF EXPERIENCES				
SENSING	VISITING	PERFORMING	MAKING	GROWING
e.g. touching smelling tasting hearing	e.g. field trips guests in the classroom	e.g. music gymnastics dance kayaking	e.g. cakes pots dresses bookends models	e.g. plants cultures chemical formations RAISING pets, frogs
VIEWING	SHARING	DRAMATIZING	CRAFTING	CREATING
films television pictures sculpture animal behaviour	circle games show & tell artifacts discussions interviews	role play mime masks plays scenes	with clay wood paper cardboard cloth straws	designs posters poems games computer programs
EXPERIMENTING in Science, Art, Dance, Physical Education, Music and Computers.				

Activities can be planned as physical, social, intellectual and language learning experiences for students. During the activities, students grapple with thought and language together within a specific context. By constructing models, baking cakes, playing roles, making pottery, and watching animals, students attach significance to the language they hear and use. They encounter language which is suitable for the participants, the setting, the topic and the task.

Actual experiences shared by students and teacher can become the springboards for further learning. A performance for the students by a theatre company can become a catalyst for discussion, writing and further research. A student's painting can become the stimulus for writing, which can then become reading material for other students.

From the preschool to the postgraduate level, experiences provide a solid base for learners to build upon. Experiences provide particular practical cases and examples.

CONTENT

Content is the centre of the framework for planning instruction; it is the subject matter which language conveys.

The Ministry of Education has subdivided general content into specific subject areas and has provided curriculum guides as listed in Diagram 2. These guides specify cognitive objectives concerned with mastering knowledge and affective objectives concerned with building positive attitudes, values and feelings.

Teachers work towards an understanding of concepts, principles and theories within a subject area, and knowledge of modes of organization and conventions. Since knowledge is never learned in an emotional vacuum, subject matter teachers are also concerned with attitudes and feelings as they affect learning, and with an appreciation of modes of inquiry.

Theoretically, all students have access to curriculum in all disciplines; in practice, however, many students have different entry points and may require objectives which bridge the transition to the mainstream.

In planning for E.S.L. instruction, teachers may select content from the curriculum of one particular subject area or may organize units around topics or themes such as "Light and Illusion", "Nutrition", or "The Olympics" which integrate the subject matter from various disciplines.

Learning to use language through the structure of specific subject matter is highly motivating for students. Linguistic forms become de-emphasized. Exploring, enquiring and problem solving lead the students into meaningful communication.

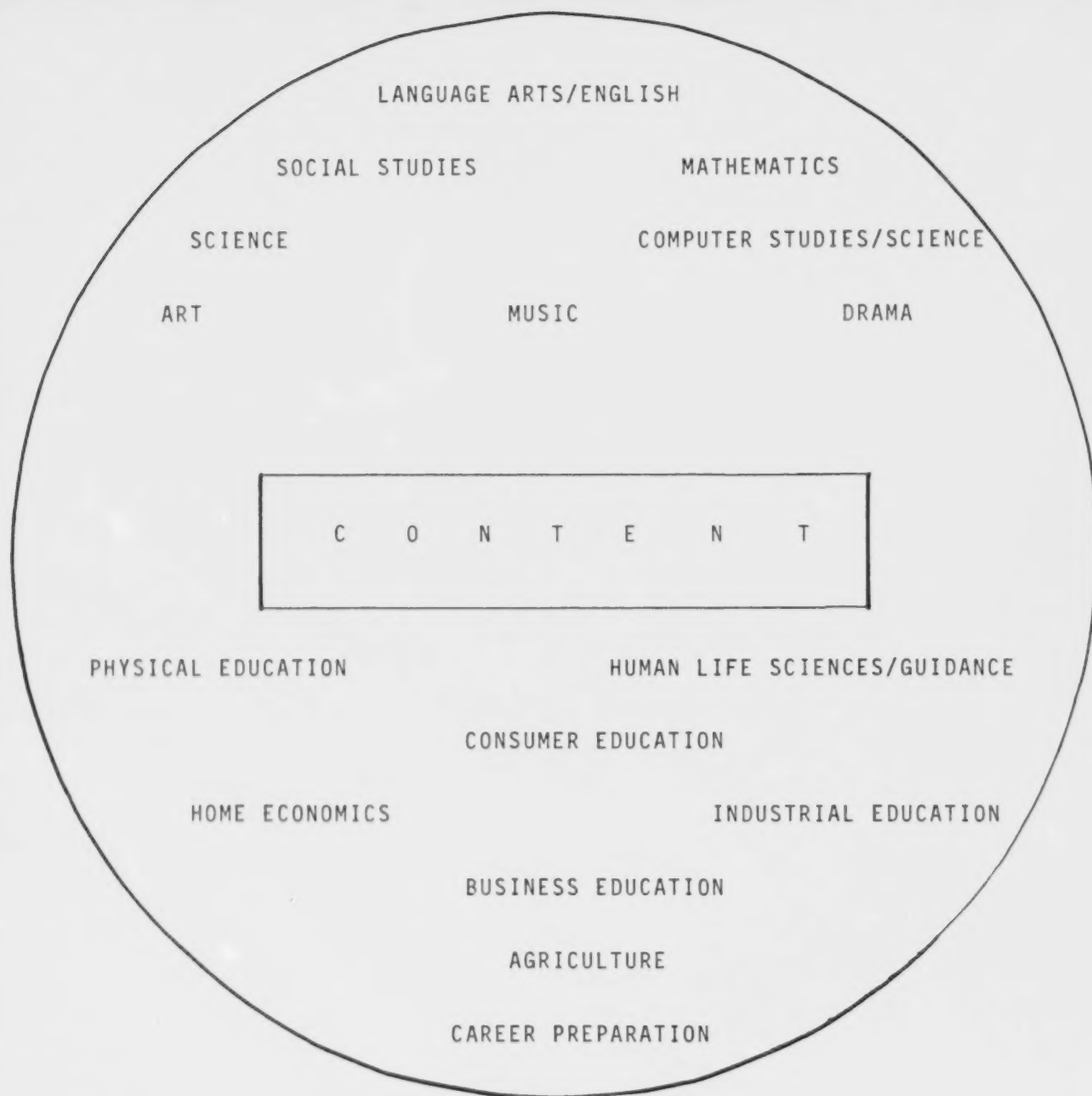


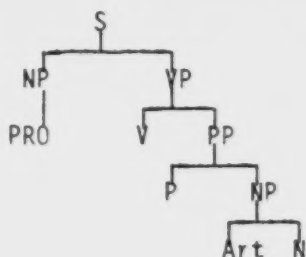
Diagram 2

CONTENT: SUBJECT MATTER DERIVED FROM BRITISH COLUMBIA
MINISTRY OF EDUCATION
CURRICULUM GUIDES IN THE SUBJECT AREAS

KEY VISUALS

Key visuals convey content. Types of key visuals include diagrams, graphs, outlines, tables, charts, flow charts, slide presentations, action strips, timelines, timetables, calendars, symbols, equations and maps. (Refer to Diagram 3.) Key visuals are very special; they do not include all visuals and samples used in instruction. Criteria useful for identifying key visuals are listed in Table III.

Key visuals provide information packages which organize and simplify content; they make visible the cognitive structures which underlie the content (Mohan 1985). A tree graph, for example of the structure of a sentence, makes visible the cognitive structure of classification.



This tree shows these syntactic classes: sentence, noun phrase, pronoun, verb phrase, verb, prepositional phrase, preposition, article, noun.

Because key visuals present essential information directly and in a relatively neutral way, they make communication clearer and are indispensable for promoting the understanding of content. They lower the language barrier.

Key visuals are ideal for adapting content for E.S.L. learners, and in lesson planning can be used as advance organizers, presentations of information, summaries, or all three.

Consider the timing for using maps during a lesson. As an advance organizer, a map of Canada showing geographical features can be unfurled at the start of the lesson. The map draws attention and helps establish the focus. Simplified map outlines can be thermofaxed for the overhead projector, and, during presentations of new information, changes of features over time can be shown. For instance, the movement and receding of glaciers in Canada during the Ice Age can be shown. The maps can be reviewed at the end of the lesson to go over the content. Also, students can fill in their own maps during the lesson or as a follow-up exercise.

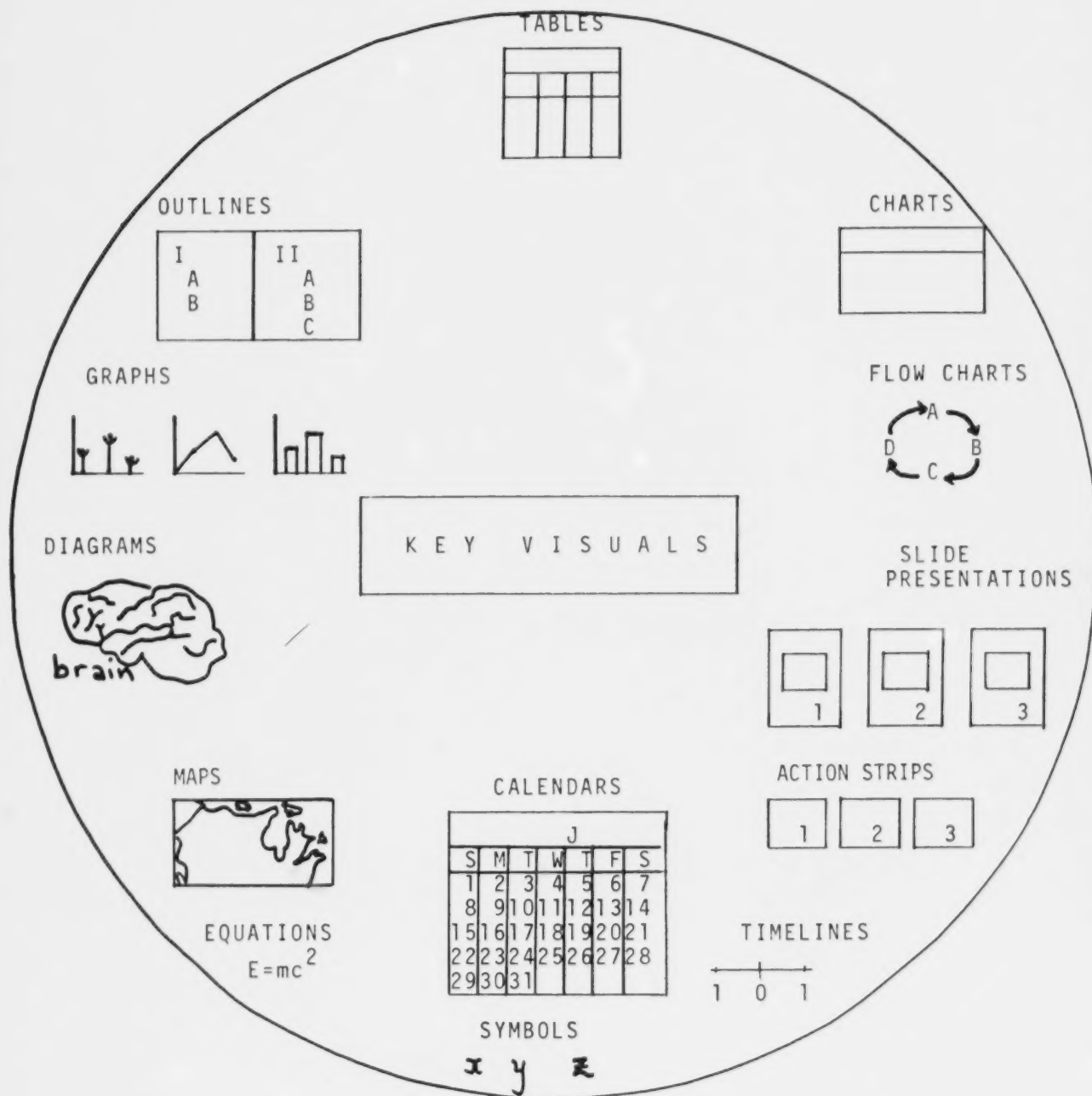


Diagram 3
TYPES OF KEY VISUALS

TABLE III CRITERIA USEFUL FOR IDENTIFYING KEY VISUALS¹

A KEY VISUAL IS MORE THAN	A KEY VISUAL IS
an attention stimulator	a package carrying information
an illustration	a visible framework of the shape of the content
a visual aid	an abstraction of basic information
a visual backdrop	a focus on the core of the content
a simplification of the text	a display of essential information without language overload
a representation	an explicit depiction of relationships
a particular and practical example	a general and theoretical structure
an enrichment	a core element in understanding content
a reference point	an asset, convenient to use and to develop

¹ Some animations, films, videotapes, and arrays of pictures fit the criteria for being key visuals. Others are not key visuals, but they do provide valuable experiences because of their richness and complexity. As experiences they would portray specific details and would enliven the school lessons.

Key visuals are versatile. They can be used as springboards for language activities of comprehension (listening/reading) or of expression (speaking/writing).

Key visuals are particularly good to use with mature learners since visuals provide access to the background knowledge that the learners bring with them from their first language. Even beginning L2 learners, mature or young, can participate actively in observing, analyzing, interpreting, or filling in the visuals. This participation promotes confidence. Children with a relatively short concentration span would benefit from key visuals because of their compactness and brevity.

The learners can use key visuals such as retrieval sheets (which are charts with blanks) to gather information. The students have the language task of figuring out the questions that the retrieval sheet poses. The column headings suggest the questions. The students have the content task of gathering data, picking out relevant pieces of content information, and inserting them in the right cells. Later the data on the sheets can be expanded into full sentence answers to the original questions (Coulter 1982).

Thus key visuals can be simple types of worksheets by which students learn and explore information. The language and thinking tasks are built into the design of the worksheet. For example, diagrams are to be labelled and part-whole relationships are to be figured out. From the instructors's point of view, having students fill in a diagram is a more systematic questioning process than having students answer a list of random comprehension questions. The diagrams also summarize content information in a less verbal way. The labelled diagrams are better memory supports than student notes and are thus easier-to-use study guides.

Key visuals done by hand or by computer are showing up more often in students' texts and workbooks. They are also appearing in real world contexts such as popular magazines, newspapers, and 'how-to' instructions. So hockey scores and stock quotations are put in tables, maps show the routes for marathons, and step-by-step pictures show us how to use automatic bank services.

Computer-generated graphics such as tables, schedules, or pictographs are becoming increasingly more prevalent and sophisticated. Computer animations now analogize complicated processes. With the information explosion, key visuals are becoming more valuable as efficient communication packages for readers, learners, and busy decision-makers.

But key visuals can be aids or obstacles depending upon how they are used or ignored. Readers need direct instruction in describing, seeing relationships in, interpreting, and applying the data encapsulated in key visuals. They need to see how key visuals can distort data. They need to construct key visuals so that they can appreciate how the visuals work. (See Summers 1965.)

Intensive, carefully developed lessons are particularly necessary for students who come from cultures unused to reading messages from pictures and graphics. These students will need more time to become acculturated as visually literate people. They need to see and to interpret from within a new culture.

Several British Columbia curriculum materials pay heed to key visuals. Notably, materials for English, social studies, science and mathematics devote entire units to the interpretation and organization of information in key visuals: for example, they work with outlines, timelines, maps, graphs and tables.

The "how-to" section in this volume provides sample lessons using key visuals in various ways and the second resource volume lists very helpful references.

Particularly recommended is Chapter 11 "Visuals: Seeing Is Convincing" from the Composition 11 teacher reference book Occupational English, 1981.

A survey of the references shows that the terminology for labelling key visuals is not used consistently among authors. Sometimes, the term graph is used synonymously with chart, or diagrams are called charts, or comic strips are called action strips.

These inconsistencies need not concern teachers or students, because the label itself does not affect the key visual package or the contents therein.

THINKING SKILLS

TAXONOMY OF THINKING SKILLS

Table IV outlines a taxonomy of thinking skills derived from Mohan's categories of discourse (1979, 1985).

In the taxonomy, the three broad stages are OBSERVING, SEQUENCING, and DECISION-MAKING.

The skills represented within the dotted lines are graded horizontally from left to right: from specific to general and from practical to theoretical. The specific column treats of single cases; the comparative, with two cases; and the general, with more than two cases.

So identifying, labelling, describing, ordering chronologically, narrating, following instructions, noting a process, forming personal opinions, making decisions, solving and detecting problems are deemed to be thinking skills concerned with specific, practical cases.

Classifying, defining, generalizing about descriptions, formulating principles and theories and policies, evaluating, and recommending are viewed as thinking skills involving general, theoretical matters.

The middle column lists these skills which involve two cases: comparing, contrasting, forming analogies, measuring, ordering spatially, relating causes and effects, predicting, hypothesizing, proposing alternatives, and concluding.

The inclusion of some of these thinking skills in the taxonomy may be debated and the placement of some skills may be refined.

TABLE IV
TAXONOMY OF
THINKING SKILLS¹

Stage	1 Case: Specific	2 Cases: Comparative	More than 2 Cases: General
OBSERVING	identifying labelling describing	comparing contrasting forming analogies measuring ordering spatially	classifying defining generalizing about descriptions
SEQUENCING	ordering chronologically narrating following instructions noting a process	relating causes and effects predicting hypothesizing	formulating principles formulating theories
DECISION-MAKING	forming personal opinions making decisions solving problems detecting problems	proposing alternatives concluding	formulating policy evaluating recommending

¹Derived from Mohan's categories of discourse (1979, 1985).

CAUSE AND EFFECT REASONING: AN EXAMPLE

Surveys of curricula in different subject areas reveal the recurrence of the thinking skills listed in Tables I and IV.

Cause and effect reasoning, for example, is a process fundamental to the study of science, social studies, mathematics and literature.

Science	If plants are deprived of sunlight, then they die.
Social Studies	When countries want access to the same valuable resources, conflict may be the result.
Mathematics	If $x = y$, then $x + 2 = y + 2$.
Literature	Because Hamlet knew of the murder of his father, he plotted a particular course of action.

Thinking processes are continually evolving and being refined. Table IV points out that cause and effect reasoning, for instance, involves sequencing. Putting events in chronological order may be one prerequisite for cause and effect reasoning. Thinkers, of course, must be wary of giving a causal relationship to conditions or events which follow one another in time. To be able to form scientific principles or laws and understand them, thinkers must use cause and effect reasoning.

The relationship between thinking skills and KEY VISUALS deserves discussion.

Thinking skills can be viewed as ways of processing cognitive structures, examples of which include definitions, classifications and chronological order. As noted earlier, classification trees and timelines are KEY VISUALS. They are visible. They evoke and focus thinking processes.

A timeline could be drawn to show the history of urban renewal. The timeline calls upon the thinking processes involving sequencing, especially interpreting the order of events and possibly inferring causal connections amongst the events.

Key visuals are abstract and symbolic. They are best designed for stimulating and recording the more general and theoretical thinking processes involving classification, principles, and evaluation.

SCHOOL LESSONS

Individual lessons activate various kinds of thinking processes from the entire taxonomy.

A science lesson, for instance, may begin with a general statement of the purpose of an experiment, then shift to identifying and labelling parts of apparatus, controlling variables, following instructions, noting a process, hypothesizing relationships and eventually arriving at general statements which are principles or laws. These general scientific statements form a basis upon which students can form opinions and evaluate decisions in real life situations.

Since every lesson should end up with teacher or student evaluation of how well the cognitive objectives have been met, lessons inevitably will have a decision-making stage.

Similar to this science lesson, any lesson across the curriculum can involve students in thinking at different levels of complexity.

What may be one lesson for regular students may need to become several lessons for second language students.

THOUGHT AND LANGUAGE

Language and thought are intertwined. Language is integral to the formation of concepts, which involves learning to "direct one's own mental processes with the aid of words or signs" (Vygotsky 1962:59). Since words label concepts and are specific to a culture, the way that thought is verbalized will reflect differing world views. Culture influences the language used to communicate thoughts.

Language is the agent which facilitates the verbalizing, clarifying and sharing of thoughts. It is the symbol system which allows one to conceptualize and communicate abstract principles, theories and policies. Language gives form to the processes of inquiry which direct the focus and methodologies of subject matter disciplines.

The role of thinking processes is vital to all parts of the E.S.L. Framework. Language, however, gives form to conceptualizing and theorizing; language embodies thought in discourse of various types.

Thinking processes are complicated and diverse, activated during the acquisition of new information, the integration of new information with knowledge and experience already there, and finally the communication of the information in a meaningful context.

LANGUAGE SKILLS

PRINCIPLE #6: INTEGRATION

The major goal of using the E.S.L. Framework is to develop language skills. The contention is that this goal is most effectively and efficiently reached by using an integrated approach which adapts the regular curriculum.

Language instruction becomes part of subject area instruction.

Exclusive concern with language instruction and a formal approach involving grammar exercises, memorized rules and pattern practice are not being recommended. There is a place for instruction involving formal features of the language through brief explanation, vocabulary lessons and attention to appropriate style. However, this instruction should be done in the context of purposeful communication.

The goal of developing language skills is itself but a means to two more important ends. Language is valuable as both a medium for communication and for learning.

LANGUAGE AS COMMUNICATION AND LEARNING MEDIUM

Communication entails the conveying of messages. Although people use many different media for exchanging messages, language is our major communication system. Since language is the most useful system for expressing messages which are displaced in time and space from the moment of transmission, language allows us to speculate beyond the confines of what we can observe and beyond the limits of 'common sense' reasoning. Language has the capacity to convey abstract and 'fantastic' notions.

While language plays a major role in communication and in social relationships, it also has an important personal function in academic settings. The individual uses language to learn and to discover what is being learned - to 'dialogue with self' - and then to reformulate ideas for communication with others. Wells (1981), culling a phrase from Lock (1980), calls this process 'the guided reinvention of knowledge'. The individual reconstructs knowledge with the guidance of others.

Language is a very complicated communication system. Which aspects of language and language use are the most important and useful ones to concentrate on in an integrated approach?

Diagram 4 identifies four areas of language skills to be attended to.

The areas are ordered from the general to the specific: they highlight the need to learn varieties of English suited to the situation; to work with chunks and units of language larger than the sound, the intonation contour, and the sentence; and the need to match meanings with an array of linguistic expressions.

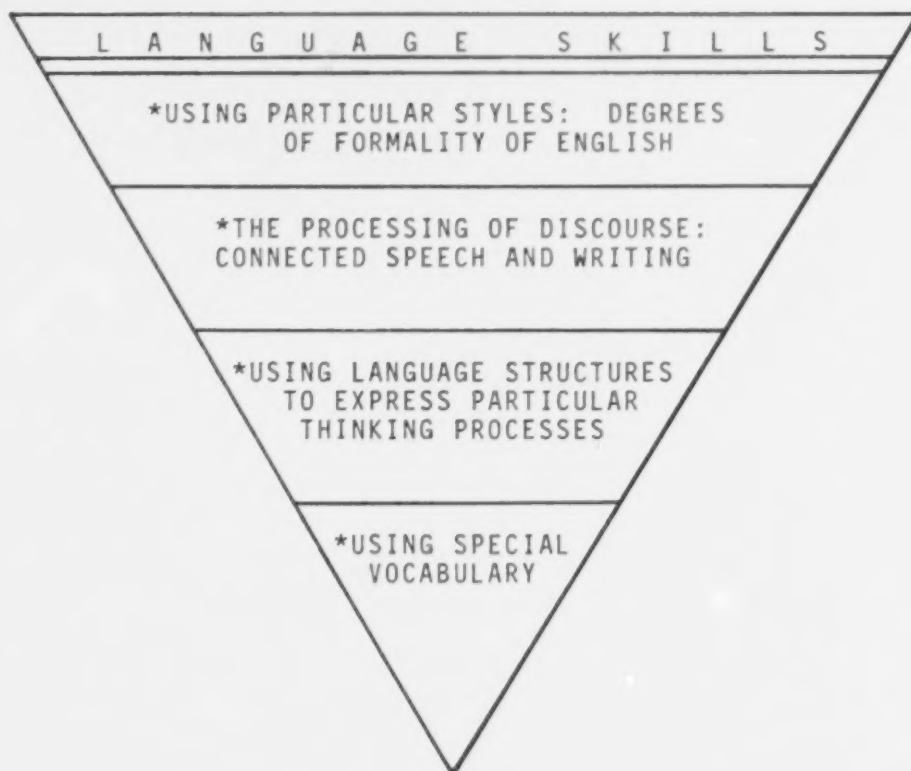


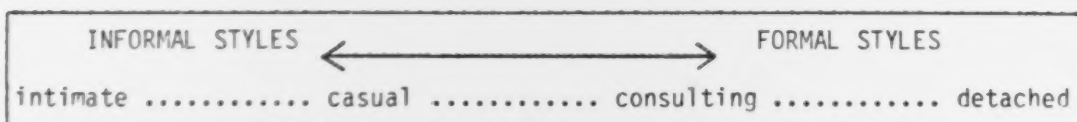
Diagram 4

LANGUAGE SKILLS

The areas of language skills are now discussed in more depth.

English usage varies according to the situation. The PEOPLE involved and the roles they play, the SETTING (time and place), the ACTIVITY, the TOPIC under discussion, and whether SPEECH or WRITING is the mode of communication will influence the variety of language produced.

Styles of English usage vary on a continuum from very informal to formal as shown by Diagram 5. Every feature of language is affected during the transition from one level of style to another, namely, the phonetic features, the lexicon, the syntax, and the way the discourse is ordered. The transitions cannot be precisely marked: one level overlaps with another.



Informal styles include the intimate and casual usage appropriate among those who share close relationships, such as family, friends, classmates, team and crew members. The mode of communication is usually oral and topics tend to be personal feelings or practical matters embedded in the present situation or immediate future. Casual style is marked by the trendy use of slang. Social communication tends to be informal.*

Formal styles include the consulting and detached usage appropriate among those whose relationships are more distant and aloof, such as professors and students, colleagues, employees and employers, acquaintances and strangers. The mode of communication may be oral or written and topics tend to be others' feelings, general concerns, or theoretical information. The timeframe extends beyond the here and now: the situation is not immediate.

*Sociolinguists are examining these tendencies by using correlational studies. Note that face-to-face situations can also be highly formal depending upon the social event and the topic. Even acquaintances and friends may, on occasion, use formal language among each other.

The detached style differs from the consulting style in degree of formality because it is used for monologues rather than dialogues, for situations where the interaction between the sender and the audience is reduced or non-existent. The detached style is used in lectures, news broadcasts, textbooks, and formal essays prepared for unknown audiences. In such situations, the language is said to be disembedded and context reduced. The detached style is marked by the use of language which is impersonal, explicit and precise. It is commonly used to express academic content. Academic communication tends to be formal.

Some dictionaries describe the degree of formality of some expressions with terms like 'formal, technical, informal, colloquial and slang'. These labels provide guidelines for usage by teachers and students.

Two activities occurring during a cooking class can illustrate how language styles vary when the context and audience change. Writing up a recipe can be an exacting task done by an individual. The recipe is a record to be used again, possibly by a stranger; legibility is important. The format is well-defined: ingredients and measures must be listed perfectly; the procedures must be sequenced accurately and completely. The language style is usually formal and detached. Following the recipe as the cooks prepare food in class can be accompanied by casual reading aloud and spontaneous talk and negotiation. The style of the recipe and the style of talking which accompanies the cooking are very different. The students need to be able to handle both styles.

Second language students need to be able to understand and use different styles, particularly the consulting and detached styles. As they gain more experience in a subject area, they will become more familiar with the ways that topics are investigated in the area. They will learn particular modes of inquiry and activity and the linguistic expressions that go along with the inquiry and activity. The students can grow in sociolinguistic awareness by hearing and reading appropriate language models, practising specific styles in context, and getting feedback from fellow students, aides, and teachers, and ideally from audiences distant in time and space.

Since E.S.L. students' comprehension is often diminished rather than enhanced when less formal, more colloquial styles of presentation are used, caution in the use of informal, idiomatic English is advised (Yorkey 1977; Coelho 1981). Standard expressions and formal style are more easily and universally understood, especially in the academic areas.

THE PROCESSING OF DISCOURSE

DEFINITION OF DISCOURSE

In linguistics, discourse refers to connected speech or writing consisting of more than one sentence. By its very nature, discourse requires a structure which is organized beyond the single utterance or sentence. A discourse is regarded as the largest unit of language and may be referred to as a text.

A single instance of discourse is any complete communication having a sender, receiver, and message bound by a purpose.
(Moffett & Wagner, 1976: 12)

Examples of a discourse include a conversation, a lecture, a letter, a poem, a short story, an ad, a label, an interview, an essay, a script, an announcement or a joke.

While the term discourse has not commonly been used in schools, it is a very convenient term for use in several disciplines including education. The concept of discourse covers simultaneously all four of the basic language arts: listening, speaking, reading, and writing.

INTERRELATIONSHIPS

Diagram 6 displays the four-way nature of communication via language: we may receive or send messages, orally or in writing. The term modality refers to the two types of information processing involved (receiving and sending) and to the two modes (speech and writing). Arrows in Diagram 6 connect skills that share similarities.

MODALITY	RECEIVING INFORMATION (DECODING)	SENDING INFORMATION (ENCODING)
	Listening	Speaking
Oral Mode	Listening	Speaking
Written Mode	Reading	Writing

Diagram 6: MODALITIES OF COMMUNICATING VIA LANGUAGE

The similarities, differences and interrelationships among the four communication skills warrant discussion.

Modes: Oral and Written

Listening and speaking both operate with spoken discourse; reading and writing involve written discourse. Contemporary analyses of discourse are beginning to build descriptions of the differences between written text and talk. More likely to be expressed in a formal style, written text is unlike talk in its choice of lexicon, explicitness of syntax, and patterns of organization.

Switching from a written mode to an oral mode or conversely is like an act of translation. Every language feature is affected in some way during the switching of modes. At first it may be helpful for students to stay in the same mode.

If students read passages, the most natural follow-up is to have them write in response, either to express their degree of comprehension or to express themselves in a creative genre.

Oral and written discourse also differ in the amount of processing time available. Interpreting written material can be a more leisurely task which permits the going back over unclear material. Students may at times appear to be better at writing than speaking or to be better at reading instructions than listening to them orally. Two factors may account for these discrepancies in performance---time for processing and/or a propensity for risk-taking---rather than greater linguistic facility in written than oral skills. Shy students may be reluctant to take risks in oral communication and thus fail to reveal how much language they actually understand.

Information Processing: Receiving and Sending

Listening and reading are alike in that they are both acts of receiving information. In both cases, the learner can obtain meaning from the discourse without understanding each lexical item in isolation. Familiarity with the topic or language redundancy help the learner fill in the missed items.

Speaking and writing are alike in that they are both acts of sending information. In both cases, the onus is on the sender to determine lexical choice, correct syntactic form, and rhetorical organization.

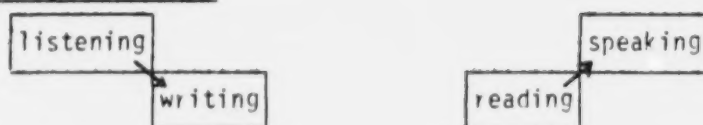
Listening and reading are obvious means whereby a learner comes in contact with new information. Talking and writing, however, are also very positive forces for learning - for 'coming to terms with ideas' and relating the unknown to the known. Talking and writing are very important for representing experience to the self in order to make sense of new information.

When both L1 and L2 students talk and write during early stages of learning new material, their expressions may be ungrammatical. Their expressions, sometimes hesitant, repetitive and ill-formed, are natural consequences of the use of language to explore ideas. Initial attempts at discussion and first drafts deserve to be acknowledged as such.

Fluency and increased grammaticality in speech and in writing will ensue as ideas begin to make sense. Precision in expression is the eventual goal for all students.

Receiving messages differs markedly from sending messages in the demands that are placed on the learner. Learning to receive messages will not naturally transfer to learning to send messages. The reasons for this are not clear but it appears to be a combination of psychological factors (such as inhibitions and cultural expectations) and the need to practise a skill in order to improve in it. On the other hand, development in decoding skills can affect development in encoding skills and vice versa, and development in oral language can affect development in written language and vice versa. However, transfer of abilities across modalities cannot be taken for granted.

Crossing Modalities



Changing from listening to writing involves a double switch: from an oral mode to a written mode and from a receptive act to an expressive act. This dual crossing of modalities complicates psycholinguistic processing. It also changes the audience, situation, and cognitive task. Suitable assignments following language arts experiences avoid crossing modalities. For example, the logical progression after students watch and listen to a film story is to engage in non-verbal activities such as mime or oral activities such as retelling the story. The mode remains the same (non-verbal/oral), the audience and the context remain similar (teacher, peer, self in a classroom setting), and the cognitive tasks involve observing and sequencing. If the prescribed follow-up task is changed to writing a new ending to the film story, the mode is changed (oral → written), the audience is potentially extended and distant, the context is removed in time and space (disembedded) and the cognitive tasks involve observing, sequencing and decision-making. The appropriate style for the writing would verge towards the more formal.

Although students need to be able to cross modalities as they become fluent in L2, premature attempts at switching from listening to writing or from reading to speaking may prevent students from showing what they know and understand. It is important for teachers in their planning to analyze the cognitive and linguistic skills involved in each task so that they can assign communication exercises which evolve naturally from the lessons and become progressively more complex.

Conclusion

The skills of listening, speaking, reading and writing are very much interrelated. They operate with a common system - language. As such, they draw on the same grammar and in most contexts are highly interrelated and interdependent. Progress made in one skill can affect progress in another, e.g. improvement in listening comprehension might lead to growth in reading potential through increase in vocabulary and knowledge of the world.

Reading might prompt growth in speaking and writing through increase in vocabulary and opportunity for attention to variety in syntactic style and rhetorical organization. The kind of thinking practice demanded in note-taking can increase listening efficiency and consequently organization of thoughts.

In conclusion, awareness of the interrelationships among the components of language (listening, speaking, reading, writing) is essential for understanding the role of language in communication and learning.

DISCOURSE TASKS

Definition and Diversity of Discourse Tasks

The term discourse task refers to the act of processing a particular kind of discourse by listening to it, orally composing it, reading it, or writing it up. The quantity and diversity of discourse tasks may be observed in Table V.

For each discourse task, for example, listening to a news broadcast, participating in a job interview, reading an editorial, or filling out an application form, publishers have produced textbooks and self-help materials with detailed examples, exercises, and techniques designed to develop competence in the task.

Teachers are encouraged to check out specific materials in the annotated resource sections.

At one time or another, students need to practise all of the tasks itemized because each task makes some specific kind of demand on the students' linguistic and cognitive processing.

Even a single lesson, for instance a short explanation and demonstration by the teacher, may call for abilities in all modalities and various 'manipulations' of the information presented.

The students could first begin by listening to the teacher, observing a media presentation and perhaps taking rough notes. After reading through their own notes, students may read and copy teacher notes from the blackboard or overhead, refine their own rough draft and sketches, answer questions (oral or written), or give an oral summary to the class or a small group of peers. Follow-up sessions could include expressing an opinion during discussions, collecting more data from books or from the community, and writing summary reports.

TABLE V DISCOURSE TASKS¹

LISTENING TO	SPEAKING
THE TEACHER .conduct classroom lessons (monologues) -give instructions -give explanations -give information .participate in classroom dialogues -ask questions² -answer questions -acknowledge .chair discussions .read aloud stories, poems, and factual material .tell stories .dictate passages, spelling words OTHER STUDENTS (Refer to the discourse tasks listed under speaking.) GUESTS .present information .describe work .tell stories .argue a case .perform .dialogue .discuss .be interviewed MEDIA PRESENTATIONS .audio of documentaries .news/sports broadcasts .lyrics, plays .cassettes of read-along books for science and literature	THE STUDENTS .participate in classroom dialogues -ask for help -ask questions -answer questions -chat .participate in classroom discussions -express opinions -express feelings -confer about plans, projects, ideas .report orally .play roles .read aloud announcements stories scripts

¹These tasks are partly compiled from the results of a questionnaire to British Columbia teachers on language skills important in content areas. The questionnaire was adapted from Michael Marland's book Language Across the Curriculum (1977) and curriculum surveys done in the province of Alberta (1982).

²In the oral mode, asking questions, asking for help, answering questions, and acknowledging are speech acts which are used to build discourse. Strictly defined, they are not discourse tasks.

TABLE V DISCOURSE TASKS (continued)

READING	WRITING
THE STUDENTS READ .instructions - forms - lists - timetables - calendars - letters - maps - etc. .literature .poetry .short stories .novels .plays .biographies .memoirs .essays .factual material .chronicles .history .science .newsstories .philosophy .the types of discourse above - for a variety of purposes +previewing +scanning +skimming +researching +editing +proofreading +enjoyment	THE STUDENTS .answer questions .short answer .longer discourse .label .copy notes .make notes .make lists, outlines .fill in forms - questionnaires - surveys .take dictation .write journals .write letters .write up reports .compose using literary genres .write persuasive pieces .edit various discourse types

Developing Competence in Tasks

First of all, the teacher analyzes a discourse task into three stages for guiding students' learning:

1. a motivating stage - having students become aware of the need to master a discourse task for some authentic situation;
2. a practice stage - having students practise the required elements of the task in isolation; and,
3. an integration stage - having students reintegrate the practised elements in a natural context.

The following example with NOTETAKING illustrates these stages and shows how they are recycled as competence develops.

1. As early as Grade 3, E.S.L. students need to realize that many learning and communication situations require notetaking skills. They will be motivated also to develop notetaking skills when they recognize that notetaking can aid their comprehension by helping them recall information and organize it.
2. Then they will benefit from informed guidance in making notes from various sources: teachers' explanations, lectures, meetings, interview sessions, or from textbooks, magazines, books, encyclopaedia and dictionaries. The students can be shown useful formats for recording information such as typical study cards and retrieval sheets. They can also be shown a variety of techniques for recording notes:

```
outlines  I
           A
           B

          II
           A
           B

         III
           A
           B
           C
```

TECHNIQUE FOR MAKING NOTES

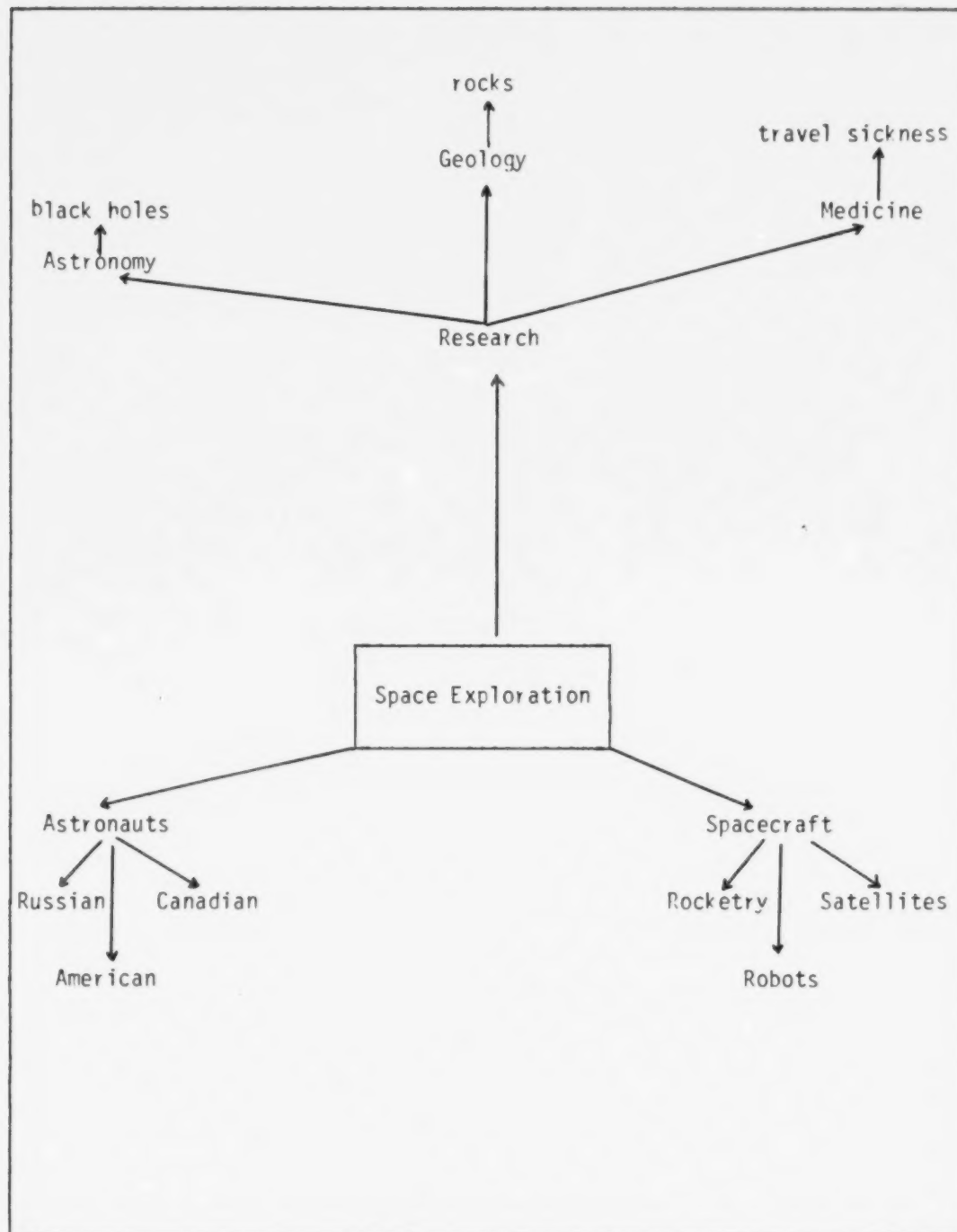
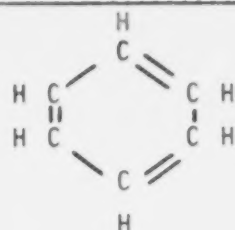


DIAGRAM 7 THE WEBBING GRAPH

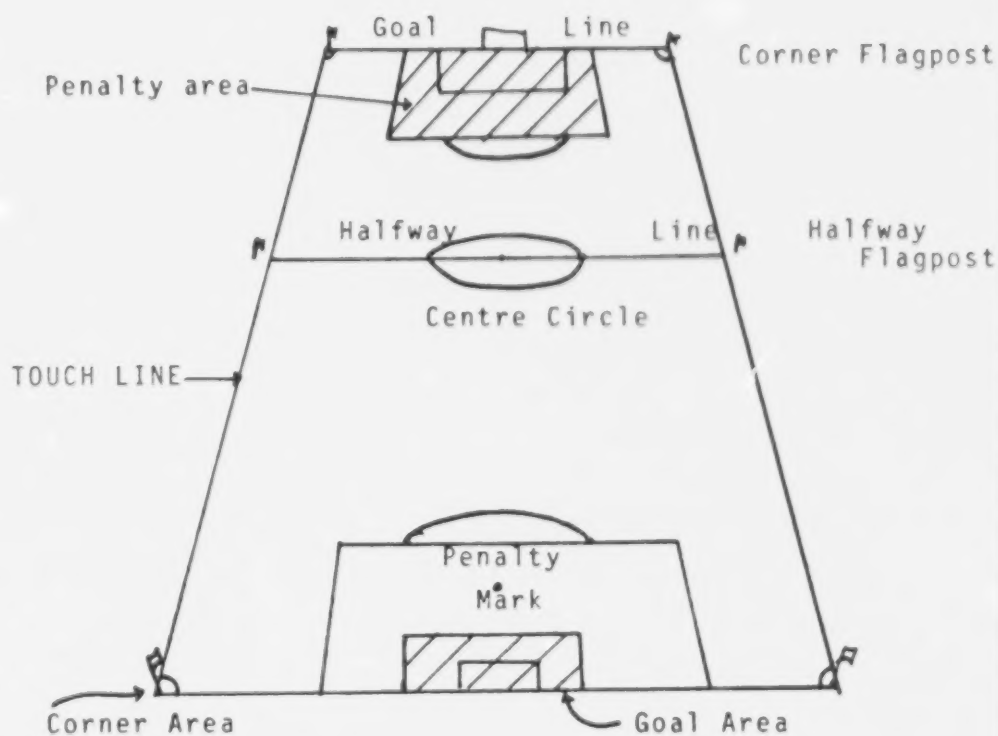
TECHNIQUE FOR MAKING NOTES



benzene

$$\frac{\text{numerator}}{\text{denominator}} = \text{quotient}$$

$$\text{numerator} \overline{) \text{quotient}} \\ \text{denominator}$$



Rectangular Field for Playing Flag Football

DIAGRAM 8 DIAGRAMS

Developing Competence in Tasks (Continued)

How the students use their notes will influence the format and techniques they use, and the amount and kind of detail contained. Anecdotes which are ideal for retelling may not be suitable in a written report. Sources of quotations, paraphrases, pictures and graphic aids must be documented carefully for written reports but they may be relatively disregarded for oral presentations.

For this practice stage, the teachers needs to recognize that notetaking is a complex task. Analyzing notetaking into its cognitive and linguistic subskills reveals this complexity.

Cognitive Skills Involved in Notetaking

- knowing when to take notes and when not to take notes
- identifying the presenter's general lecturing and organizing style
- getting the big picture: using overviews and advance organizers to identify the general plan
- identifying main ideas and key concepts
- identifying digressions and irrelevancies
- identifying and using examples
- interpreting visual information

Linguistic Skills Involved in Notetaking

- reducing sentences to point form
- using symbols and abbreviations
- organizing main ideas and details into outlines
- paraphrasing
- summarizing
- recording sources of information

Specific lessons can be designed to practise each of the cognitive and linguistic skills so that notetaking becomes an easier learning and communicative task.

3. E.S.L. students will use notes for various genuine purposes across different disciplines.

Notes form the basis for their review of information or for their oral /written reports for different audiences and are important steps in learning and studying, and in information-gathering and reporting.

Individuals will develop different notetaking styles which reflect their preferences. The degree of success they achieve in learning or in reporting may indicate the elements of notetaking which need more practice. So the motivation and practice stages are re-activated.

Units of language smaller than the discourse are now examined.

USING LANGUAGE STRUCTURES TO EXPRESS PARTICULAR THINKING PROCESSES

In learning the language of school lessons, the second language student has the formidable job of understanding the new ideas, and figuring out and remembering the language to express this understanding. The student needs to connect meanings with expressions, to connect thought with language.

The teacher needs to model the required linguistic structures in a context where the connections between meanings and expressions are clear.

To help students and teachers make these connections, Table VI on the following pages matches thinking processes such as classifying and deciding with specific language structures that are commonly used. The themes for the examples of structures are the planetary system and space exploration.

The language structures given are but a small sample of the models which are possible, and must not be considered prescriptive or exhaustive.

The teacher's selection of structures will depend on such factors as the needs and the level of language proficiency of the students, the nature of the activity, and the preferred language usage of the region.

The table and the approach develop out of contemporary reference grammars which relate language functions and structures. Useful examples of such grammars are

The Grammar Book an ESL/EFL Teacher's Course by
Celce-Murcia and Larsen Freeman and

A Communicative Grammar of English by Leech and Svartvik.

The table and approach also draw upon the examples and ideas developed in the books by Lawrence (1972, 1975) and the work of Australian curriculum developers (Williams, 1981).

TABLE VI CONNECTING THINKING PROCESSES AND LANGUAGE STRUCTURES

Thinking Process	Language Structures																
OBSERVING																	
Labelling	This is a planet. They are meteorites. It is a satellite. They are asteroids.																
Describing individual things	Planets are very <u>large</u> .																
size	Jupiter is <u>immense</u> .																
shape	The moon looks <u>round</u> . The earth is a <u>sphere</u> .																
function	The rocket nose is a <u>cone</u> .																
movement	The sun <u>gives</u> light and heat. The planets <u>travel</u> in orbits <u>around</u> the sun.																
sound	Rockets <u>blast</u> off.																
location	The comet is <u>almost</u> here.																
structure	The sun is <u>made up of</u> gases.																
density	Jupiter is <u>very heavy</u> .																
texture	The moon has <u>craters</u> .																
state	The satellite is <u>lost</u> .																
Comparing (dealing with likenesses and similarities)	Both Mercury and Venus are near the sun. Mercury is small, and Venus is too. The diameter of Venus and the Earth are <u>similar</u> in size. Common expressions of comparison:																
	<table> <tr> <td>similar to</td><td>as</td></tr> <tr> <td>similarly</td><td>just as</td></tr> <tr> <td>like</td><td>in the same way</td></tr> <tr> <td>resemble</td><td>as.....as</td></tr> <tr> <td>almost the</td><td>to have.....</td></tr> <tr> <td>same as</td><td>in common</td></tr> </table>	similar to	as	similarly	just as	like	in the same way	resemble	as.....as	almost the	to have.....	same as	in common				
similar to	as																
similarly	just as																
like	in the same way																
resemble	as.....as																
almost the	to have.....																
same as	in common																
Contrasting (dealing with differences and dissimilarities)	Mercury is <u>small</u> but Jupiter is <u>large</u> . Mercury is <u>different</u> from Jupiter because Mercury is <u>small</u> and Jupiter is <u>large</u> . Mercury is <u>smaller</u> than Jupiter. Common expressions of contrast:																
	<table> <tr> <td>differ from</td><td>on the other hand</td></tr> <tr> <td>different than</td><td>is.....than</td></tr> <tr> <td>but</td><td>although</td></tr> <tr> <td>however</td><td>while</td></tr> <tr> <td>nevertheless</td><td></td></tr> <tr> <td>even so</td><td>in contrast to</td></tr> <tr> <td>unlike</td><td>in opposition to</td></tr> <tr> <td>different from</td><td>still</td></tr> </table>	differ from	on the other hand	different than	is.....than	but	although	however	while	nevertheless		even so	in contrast to	unlike	in opposition to	different from	still
differ from	on the other hand																
different than	is.....than																
but	although																
however	while																
nevertheless																	
even so	in contrast to																
unlike	in opposition to																
different from	still																
	The comparative and superlative forms of adjectives and adverbs:																
	<table> <tr> <td>bigger</td><td>the biggest</td></tr> <tr> <td>less</td><td>least</td></tr> <tr> <td>more</td><td>most</td></tr> </table>	bigger	the biggest	less	least	more	most										
bigger	the biggest																
less	least																
more	most																

TABLE VI CONNECTING THINKING PROCESSES AND LANGUAGE STRUCTURES (Continued)

Thinking Process	Language Structures
<u>OBSERVING</u> <u>Forming analogies</u> (dealing with resemblance between things of different classes: analogies are extended comparisons)	The flashlight is <u>like</u> the sun and the tennis ball is <u>like</u> the earth. The stars <u>resemble</u> diamonds. Common expressions of metaphor are similar to those of comparison. The nature of the things compared are of different classes and can be poetic and highly figurative.
Measuring linear weight capacity speed amount	Canadarm is 15.2 <u>m long</u>. It <u>weighs</u> 410 <u>kg</u> on earth. The fuel tank <u>holds</u> 40 <u>litres</u>. Canadarm travels <u>6 cm per second</u>. <u>Quantifiers</u> all, some, none, not all, many, much, not many, not much, a few, few, a small number, a little, little, more, most <u>Pronouns</u> everybody, everything, someone, something, anybody, anything, no one, nothing <u>Adverbs of frequency</u> always, often, sometime, seldom, never, ever <u>Adverbs of duration</u> always, forever, for some time, for awhile, not for long <u>Adverbs of degree</u> entirely, very, somewhat, rather, quite, a little, a bit, not at all

TABLE VI CONNECTING THINKING PROCESSES AND LANGUAGE STRUCTURES (Continued)

Thinking Process	Language Structures
<u>OBSERVING</u> Ordering spatially	to, at, away, from, on, off, across, over, along, through, in, out of, in front of, by, beside, near, next to, above, on top of, behind, under, beneath, below, underneath, between, among, amid, opposite, towards, into, past, around, up, down, beyond, forward, etc. where in which, to which, by which..... north, northern, south, southern..... to the left, to the right adjacent distance midpoint diagonal edge limit parallel, parallel to perpendicular to opposite vertical, horizontal
Classifying (the grouping of items according to their similarities and differences)	Planets are a <u>kind</u> of heavenly body. We can <u>divide</u> heavenly bodies into types. There are different <u>types</u> of heavenly bodies. Common expressions of classification: Generic forms like: animal, vegetable, mineral Species nouns like: kinds, types, parts, categories, qualities, classes, methods..... Classifying verbs like: to be, to place under, to fall into, to classify, to divide.....
Defining (usually names the term being defined, puts it in a general class, points up its distinguishing features from others in the same class)	A moon is a <u>kind</u> of satellite (general class) which orbits a planet (distinguishing feature). Definition: to define to classify to explain to paraphrase in definition in explanation Plus species nouns like: kind, species, class, type, form category

TABLE VI CONNECTING THINKING PROCESSES AND LANGUAGE STRUCTURES (Continued)

Thinking Process	Language Structures
<u>OBSERVING</u> Generalizing about descriptions	Expressions of amount as listed in the section on <u>Measuring</u>: most, some, lots of, a lot of, a few, all, not all, every, some..... + generally, generally speaking on the whole in most cases under most circumstances usually Special omission or use of the definite article <u>the</u> and the indefinite articles <u>a</u> and <u>an</u>: The comet has a starlike centre. Comets have starlike centres. <u>A</u> comet has a starlike centre. Power is needed at each stage. Fuel is needed. <u>Verb phrases</u>: can is able to are able to is associated with is related to Astronauts <u>can load</u> cargo from their cabin with the robot. <u>Tense of verb</u>: present tense, indicating a continuing state of affairs or action Comets often <u>have</u> a cloudy tail of light which <u>always points</u> away from the sun. also simple past tense

TABLE VI CONNECTING THINKING PROCESSES AND LANGUAGE STRUCTURES (Continued)

Thinking Process	Language Structures
SEQUENCING Ordering chronologically	The booster launches the ship. The booster falls away. Stage two ignites. The ship is in orbit. Stage three falls away. The ship is by itself.
Narrating Play-by-play commentary report	Here we are at Cape Canaveral, Florida waiting for the blastoff of the space shuttle, Challenger. Only five minutes to countdown..... Aspect: progressive Verb tense: present The space shuttle Challenger took off from Florida. It positioned itself in its orbit. The astronauts flew into space without their lifelines today. Verb tense: past
Following instructions	The numbered steps as given in a recipe OR a science experiment OR a "how-to" book OR an assignment
Noting a process	When a space ship goes into orbit, <u>first</u> there is the booster launch. <u>Next</u> the booster falls away. <u>Then</u> the <u>second</u> stage ignites. <u>Afterwards</u> the <u>third</u> stage ignites and puts the ship in orbit. <u>Later</u> the <u>third</u> stage falls away and <u>finally</u> the space ship starts on its solitary orbit. Common expressions of noting a process: time words: before, after, following from, leading to, in the end verbs noting a change of state: boil melt harden shorten lengthen soften distill condense

TABLE VI CONNECTING THINKING PROCESSES AND LANGUAGE STRUCTURES (Continued)

Thinking Process	Language Structures														
SEQUENCING Relating cause and effect	If a heavenly body blocks a light source, <u>then</u> an eclipse occurs. Eclipses are a <u>result</u> of heavenly bodies blocking a light source. Pluto is the furthest planet from the sun, <u>consequently</u> it takes longest to orbit the sun. Pluto takes the longest time to orbit the sun <u>because</u> it is the furthest planet from the sun. <u>Common expressions to relate cause and effect:</u> <table border="0"> <tr> <td>so</td><td>is due to</td></tr> <tr> <td>thus</td><td>is the result of</td></tr> <tr> <td>because</td><td>have an effect on</td></tr> <tr> <td>therefore</td><td>if.....is so, then</td></tr> <tr> <td>accordingly</td><td>.....follows</td></tr> <tr> <td>since</td><td>consequently</td></tr> <tr> <td>as a result</td><td></td></tr> </table> <u>Plus causal verbs like:</u> melt, boil, harden, thicken, condense, fill, empty	so	is due to	thus	is the result of	because	have an effect on	therefore	if.....is so, then	accordingly	follows	since	consequently	as a result	
so	is due to														
thus	is the result of														
because	have an effect on														
therefore	if.....is so, then														
accordingly	follows														
since	consequently														
as a result															
Predicting	It is likely that there will be stations in space in the near future. I <u>predict</u> that space satellites orbiting the Earth <u>will become</u> a common occurrence. <u>Common expressions of prediction:</u> to predict that to make a prediction about to project in the future the next step probably the probability of														
Hypothesizing (a special kind of cause and effect reasoning; hypothesizing is more general than predicting)	If the sun lost some of its heat, <u>then it might</u> mean the end of life on earth. <u>Common expressions of hypothesis:</u> as for cause and effect with special attention given to modal verbs such as can/could, will/would, may/might, shall/should, must and to the tense and aspect forms of the verbs.														

Continued...

TABLE VI CONNECTING THINKING PROCESSES AND LANGUAGE STRUCTURES (Continued)

Thinking Process	Language Structures
<u>SEQUENCING</u> Formulating theories (generalizing about cause and effect relationships)	If gases mixed in liquids experience a zero gravity condition, <u>then</u> movement in all gases is affected in many ways.
<u>DECISION-MAKING</u> Forming personal opinions	In my <u>opinion</u> , exploring the planets is money well spent. I <u>think</u> that exploring the planets is not the best use of government money. Common expressions: I think in my view it seems to me I am positive in my opinion I argue that I consider I suppose I agree that I assume I don't know if
Making decisions	I have <u>decided</u> to go see Marc Garneau. I <u>would like</u> this one. I <u>selected</u> I <u>choose/chose</u> This is the one I <u>want</u> .
Solving problems	I can <u>solve</u> this by..... The way to <u>handle</u> this is to..... The <u>solution</u> is to..... The <u>answer</u> can be arrived at by..... One <u>way</u> to do it is to..... and then to..... and lastly to.....
Detecting problems	The <u>problem</u> is..... The problems seem to be..... It looks like.....is the <u>problem</u> . The <u>issue</u> is..... The control desk knows <u>what the matter</u> is. It seems to be a <u>case</u> of

TABLE VI CONNECTING THINKING PROCESSES AND LANGUAGE STRUCTURES (Continued)

Thinking Process	Language Structures						
DECISION MAKING Proposing alternatives	I <u>would suggest</u> that the money spent on space research would be <u>better</u> spent on medical research. <u>It would be beneficial</u> to spend more money on medical research and less money on space research. Common expressions: <table> <tr> <td>I propose that</td><td>I would urge that</td></tr> <tr> <td>I would suggest that</td><td>I would say that</td></tr> <tr> <td>I would plan to</td><td>I would demand that</td></tr> </table> It would be beneficial to It would be profitable to It would be expedient to	I propose that	I would urge that	I would suggest that	I would say that	I would plan to	I would demand that
I propose that	I would urge that						
I would suggest that	I would say that						
I would plan to	I would demand that						
Concluding	We can <u>conclude that</u>..... in <u>conclusion</u> I have arrived at the <u>conclusion that</u>..... I <u>surmise that</u>..... We may <u>deduce that</u>.....						

TABLE VI CONNECTING THINKING PROCESSES AND LANGUAGE STRUCTURES (Continued)

Thinking Process	Language Structures
<u>DECISION-MAKING</u> Formulating policy	Canadian astronauts <u>will be</u> <u>chosen on the basis of these</u> <u>criteria.</u> Canada <u>will participate in the</u> <u>Star Wars plan in a limited way</u> <u>for these reasons.</u> Space research <u>will now engage</u> <u>in medical and biological research</u> <u>for these reasons.</u>
Evaluating	I <u>judge</u> the establishment of a space station to be ill-advised. Based on evidence, I <u>believe</u> that the Big Bang theory is <u>least likely</u> to be correct. Common expressions: <u>Adjectives related to judgement:</u> good bad right wrong proper improper suitable unsuitable relevant irrelevant <u>Verbs related to judgement:</u> judge compare regard view consider should be Terms related to forming personal opinions and evaluations: <u>like dislike</u> <u>prefer disapprove</u> <u>value devalue</u> <u>appreciate depreciate</u> <u>deprecate</u>
Recommending	We <u>recommend</u> It is <u>recommended</u> that..... The following are <u>recommended</u> One <u>suggestion</u> The department is <u>advised</u> to.....

USING SPECIAL VOCABULARY

The most obvious need is to help E.S.L. students use the vocabulary associated with a theme or topic, that is, to understand the concepts, and the meanings of the words used to discuss the concepts.

For example, a science unit on the planetary system needs to establish the meanings of technical terms such as planet, moon, star, orbit, gravity, axis, atmosphere, and stratosphere.

As well, the teacher must be alert to the common vocabulary which bears technical meanings in this specialized context, for example, force, mass, pole, path and pull. The common words used in specific technical senses are likely to be problematic for both E.S.L. and regular students.

The vocabulary taught will depend to a large extent on the specific topic or subject matter. However, topics which emphasize social/psychological notions tend to include words which describe everyday objects, events across time and space, motives and feelings.

Topics concerning scientific/mathematical notions tend to include words which are borrowed from Latin and Greek such as solar, corona, spectra, or new compounds such as space-suit, jet-pack and link-ups.

Regardless of the nature of the topic, school lessons generally include words which describe basic notions. These include such items as prepositions and adverbs which refer to spatial relationships; prepositions, adverbs, adjectives and conjunctions referring to temporal relationships; and common vocabulary. Some of the items were included in the charts of the last section which related thinking processes and structures.

The introduction of new vocabulary items should be supported by real objects, illustrations, or key visuals and presented in authentic communication situations. This context of use is very important because the context determines which meanings are the relevant ones.

Some techniques to help students build meanings for words are reviewed below.

*using context clues:

formal definition - A planet is a type of heavenly body that moves around the sun in a nearly circular path.

description - Asteroids are very small objects in space.

- examples - Canadarm is one of the most advanced robots today.
- synonyms - Radar detected a pack of space debris.
This orbital junk was in the same path as the satellite.
- comparison/metaphor - The astronauts planned to practise link-ups with orbiting bodies. When their balloon exploded, their plans for a game of space tag were spoiled.
- contrast/opposites - The astronauts were first hooked with lifelines, but now they fly free in space.
- origin - Solar heat comes from the sun. Sol is the Latin word for sun.

(Visuals also provide a context for conceptualizing and figuring out the meaning of a new term.)

*building word attack skills:

analyzing the word into prefix-root-suffix
to figure out and remember meanings

using known words to work out the meanings of
new words: healthy, health, heal;
scene, scenic, scenery, scenario

*referring to a dictionary

- to check etymology
- to select the meaning which is most apt for its context
- to glean meaning from sample sentences
- to detect related and derived words
- to read usage notes which explain fine distinctions in meaning
- to check whether the word is used in special fields such as business, banking, technology, medicine
- to check whether the word bears a style label (formal/informal/slang) and whether its meaning and usage are limited to special situations

Books published recently give fresh and comprehensive techniques for teaching vocabulary to second language students (Wallace 1982; Allen 1983). Since the contemporary books draw upon the new research in semantics and linguistic pragmatics, teachers are encouraged to refer to them.

SUMMARY

Second language students studying in the various subject areas need language support. They need help in working with vocabulary, recurring language and thinking patterns, and the totality of language features which produce different types of discourse and style. It will take them some time to develop an operating sense of the variations that English can have at the phonetic, word, sentence, and discourse levels, and to develop notions of linguistic appropriateness.

The theoretical framework has been presented on the foregoing pages; a selected bibliography related to the theory now follows.

Section II provides suggestions on how to implement the framework and moves toward practical solutions for giving the language support required.

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"When experienced teachers plan, they make a set of interrelated decisions about the goals, content, materials, climate and activities of instruction. They develop 'scripts' which serve as plans of action to maintain an orderly flow in the classroom and minimize disruptions and management problems."

Virginia Koehler. "The State of Teaching: A Summary of Recent Research Findings." Education Times, April 26, 1982: 7.

"...the language arts are the core of the elementary school program and as the foundation of nearly all school activities serve to interrelate all aspects of the curriculum."

Elementary Language Arts Curriculum, Alberta
Education, 1978: 29.

SECTION II

HOW TO USE THE FRAMEWORK

GUIDELINES FOR USING THE FRAMEWORK

This framework has been designed for E.S.L. students who are in the transitional stages of language learning; that is, they are beyond the beginning level. An integrated delivery system is being advocated, a system which will accelerate student access to regular curricula.

Transitional refers to the progression of language development which takes place between the beginning or survival stage and the stage marked by native-like competency in both oral and written language. The transitional stages of language learning, in which students move toward 'academic communicative proficiency' in Cummins' terms, are not easily identifiable. These stages may span a period of four or five years; they may be marked by periods of rapid growth and periods of consolidation.

Students at transitional levels have developed considerable skill linguistically and culturally. They can ask and answer questions, express needs and desires and find out information necessary to cope with everyday living. They have fundamental skills in reading and writing although they may have difficulty organizing ideas in a way considered logical in English. Their vocabulary will be limited and the structures used will not express the depth and richness of their thoughts. In short they have learned some English, they may even sound fluent, but they are just beginning to use English to learn, to think and to communicate their inner thoughts. They need teachers who recognize the crucial role language plays in the learning process: teachers who can integrate thinking skills, motivation, cultural implications, language and content.

We realize that learning to use this framework, like learning to use a computer, will at first seem tedious and time consuming. The results, however, will be worth the effort as students progress rapidly in both language and thinking skills and begin to apply strategies they have learned across subject areas. The ultimate goal for every teacher is to advance students to the point where they approach all learning tasks with confidence and skill. We feel that using the framework will make this goal attainable for the majority of students at transitional stages of language learning.

Experienced teachers will have developed their own unique ways of planning lessons and units. However, we urge all teachers to become familiar with the precepts of this framework, to consider carefully the implications and ramifications for learning and to adopt and modify the procedures in light of their own experience.

Many beginning teachers will have encountered this approach in their preservice training. They will find the framework easier to use but will need consultation with experienced teachers to become knowledgeable about the content in all subject areas and cognizant of the inherent language difficulties.

We suggest the following guidelines for using the framework. As teachers become familiar with it and discuss and exchange ideas, adaptations and variations will result.

1. Follow the sample unit plans step by step at first, taking care to articulate the cognitive and linguistic tasks.
2. Identify the key visuals and/or experiences you will need to make the content clear and explicit.
3. Check carefully the discourse tasks planned. Be aware of the difficulties inherent in crossing modalities.
4. Decide beforehand what techniques you will use for evaluating whether or not objectives have been reached.
5. Keep referring to the theoretical framework and to the resource sections so that more explicit ways of making meaning clear may be developed.

COMMENTARY

The sample lessons which follow have been devised especially for this resource book or adapted from plans developed for actual classes by teachers at various stages of professional training and experience.

The lessons are taken from a wide range of academic or career preparation areas and may be adjusted for a wide span of ages and grade levels.

General goals are noted at the outset for some lessons which comprise parts of units. The goals state what students should accomplish as part of their studies and indicate the general philosophical stance of the planner.

Although a prototype lesson plan format is provided on the next page, the authentic lesson plans do not adhere to the prototype exactly and are not identical in format.

Subject area teachers come from different traditions for curriculum design and implementation. They differ in the degree of detail they include when spelling out the lesson ingredients and the scripting of the activities. Hence differences in the plans do appear.

The various lessons do share these commonalities:

1. OBJECTIVES specify how students will demonstrate their knowledge and skills, attitudes and values, and feelings during and after their learning experiences.

Because it is assumed that knowledge and skills, attitudes and values, have COGNITIVE aspects, thinking processes are identified with them.

It is presumed that feelings involve solely AFFECTIVE OBJECTIVES, and are thus not identified with thinking processes.

It is acknowledged that attitudes and values have an AFFECTIVE dimension also.

2. OBJECTIVES pertaining to attitudes and values are always specified because of their importance in motivating students to attend, to learn, and to remember.

OBJECTIVES pertaining to feelings are sometimes specified.

3. The LANGUAGE SKILLS section is always overtly and consciously considered by the teacher. Degree of formality, discourse tasks, structures, and vocabulary are always specified.

Students' attention may not be explicitly drawn to these linguistic features, however.

4. At every opportunity, KEY VISUALS have been identified and exploited. Even a set of sentences requiring passive voice transformations have been changed into a KEY VISUAL wherein the ordering of the sentences reviews the cognitive structure being developed (e.g. the cognitive structure of chronological order).

While the KEY VISUALS have been drawn up sometimes in a rudimentary fashion, teachers can use their creativity and artwork to make the KEY VISUALS more intelligible and aesthetic.

5. On every occasion, possible EXPERIENCES are planned to make the learning situations come alive. The experiences may be inferred from the MATERIALS and RESOURCE PEOPLE specified and the ACTIVITIES outlined.
6. Most of the lessons include EVALUATION activities wherein students' performance is judged routinely by the students themselves or by the teacher, or wherein students apply their knowledge and expertise to a new but related task or problem and receive feedback on their success.

The EVALUATION refers back to the OBJECTIVES, COGNITIVE and AFFECTIVE, which were initially identified. The EVALUATION introduces a decision-making stage to each lesson or unit.

PROTOTYPICAL LESSON FORMAT
USING A LANGUAGE/CONTENT APPROACH
E.S.L. Instruction via Subject Area(s)

UNIT GOAL

TOPIC

OBJECTIVES

Thinking Process

Knowledge and Skills

Attitudes and Values

(Feelings)

LANGUAGE SKILLS

Degree of Formality
Discourse Tasks
Structures
Vocabulary

MATERIALS

Supplies/Resources

Key Visuals

ACTIVITIES

EVALUATION

E.S.L. INSTRUCTION
VIA
SOCIAL STUDIES, MATHEMATICS, AND CONSUMER EDUCATION
SAMPLE UNITS* FROM A COMMUNITY STUDIES PROJECT

GOALS FOR UNITS

Students will gather basic information about their community, its physical environment, transportation systems, and commercial sector, and will relate this information to themselves.

Students will organize this information in charts and mathematical graphs of various types. Students will thereby work through procedures for collecting data and re-analyzing data.

Students will learn language skills useful in everyday life (addresses, postal codes, locations, directions, prepositions, transportation and shopping terms, distances, times, occupations, expressions for social interaction) and language skills useful in academic studies (geography, mathematics, and consumer education).

Students will realize that sharing and communicating information with others benefits all participants.

Students will appreciate their community and its services and will value responsible conduct in it.

TOPICS FOR UNITS			
I	Who Lives Where?	7	activities
II	Directions and Travel	11	"
III	Transportation	5	"
IV	Traffic Flow	4	"
V	Shops/Stores	8	"

*A total of 35 activities are described in these units; it is thus possible that 35 separate lessons could be derived from them. The scheduling of activities into single lessons will depend upon the students' abilities and the length of the class.

ACKNOWLEDGEMENT

These units were adapted from LEE COULTER's graduating essay: "An E.S.L./Community Studies Curriculum Organized around Key Visuals". University of British Columbia, September 1982.

E.S.L. INSTRUCTION VIA SOCIAL STUDIES

TOPIC

UNIT I - Who Lives Where?

OBJECTIVES

Thinking Process

describing

locating

describing

classifying

Knowledge and Skills

Students will communicate where they live.

Students will locate on a map where they live.

Students will ask/tell each other their addresses.

Students will understand the postal code system and be able to locate their own code.

Attitudes and Values

- Students will be willing to communicate and share personal information.

LANGUAGE SKILLS

Degree of Formality informal: casual

Discourse Tasks

answering questions orally

reading of maps, postal directory, street signs

Structures

Where do you live?

I live on _____.

at _____.

in _____.

Note: Use pronoun substitutions whenever possible
e.g. Where does she live?

What's your address?

My address is _____.

Does (name) live on (street) or (street)?

On (street).

Does (name) live at (number) or (number)?

At (number).

Do (name) and (name) live at the same address?

Do (name) and (name) live in the same building?

No they do not.

Yes they do, but in different apartments.

Yes they do.

Why?

Because they are sister(s) and brother(s)/cousins.

What's your postal code?

It's V5L 3B4.

LANGUAGE SKILLS (Continued)

Structures (Continued)

Can you show me your house?
Can you show me your apartment building?
Here it is.
About here, I think. (If newly built.)

Questions to help orient the student:

Can you find our school/Hastings Street/your street?
What streets do you live between?
Do you live between (street) and (street)?

Vocabulary

street, road, drive, avenue, crescent
address, apartment, number, postal code, directory
country, province, city, neighbourhood

MATERIALS

Key Visuals

local area maps obtained from the City Planning Department with a scale of 1:2400 so that individual buildings are clearly marked

The map may be out of date and a recently built house or apartment block may not be shown. Up-to-date mapping of individual blocks will be done later in Unit V, Activity 1 and 2.

reduced copies of the area map for each student
Some photocopying machines can reduce maps to a suitable size.

several copies of Canadian postal directories
postal code chart
numbered tacks or flags
telephone directories
copies of yellow pages directories

ACTIVITIES

1

question - answer

Teacher asks questions about addresses.
(See Structures under LANGUAGE SKILLS.)

2

question - answer

Students ask each other questions as in
Activity 1.

3

using a Canadian postal directory

Use copies of a postal directory to show how the
country/province/city/neighbourhood is subdivided
for mail delivery.

Make students aware of the letter/number/letter/
single space/number/letter/number pattern, e.g.
V5L 3T4.

If the students do not know their own postal code,
they can look it up in the directories (which are
a kind of classification system). They can look
up other classmates' postal codes, or the
school's or the teacher's and record
the codes in their notebook or on a simple work-
sheet.

Key Visual (chart)

Postal Codes

Person	Place/Address	Code
Susanna		V5L 3T4
Mei Ling		— —
Teacher		— —
	School	— —

ACTIVITIES (Continued)

4

locating residence on local area map

A large area map at the front of the room is essential for demonstration and small group work.

Have the students locate their own home or apartment building on the local area map at the front of the class and on their smaller maps.

If the students are relatively new to the area and have never used a map before, this exercise could be quite demanding. Students will have to recognize some places or streets to be used as reference points.

Some students will be able to find their street, but will not know in which block they live. At the bottom and along the side of the Vancouver local area maps, the numbers in 100's for each block are given. Thus, if the address is known, the block can be easily located.

5
(homework)

reading the names of streets as the students follow their routes to and from school

Since the students need concrete experiences in order to understand abstract maps, assign them this homework:

On your way home tonight, look at all the names of the streets you walk along or cross. When you come back tomorrow, find your home on the map.

6

reviewing where homes are on local area maps

On the master copy of the local area map at the front of the class, identify locations of homes by using numbered thumb tacks or pinned flags with names for the coded information written at the side, e.g.

- 1 - Chi Mei
- 2 - Wing Shing
- 3 - Susanna

EVALUATION

7

Given a list of businesses situated in the area, students fill in the addresses using a telephone directory or yellow pages directory and the postal codes using a directory. This evaluative test could be done in team competition if desired.

Accuracy of information and then speed and accuracy could be used to judge the work.

E.S.L. INSTRUCTION VIA SOCIAL STUDIES AND MATHEMATICS

TOPIC

UNIT II - Directions and Travel

OBJECTIVES

Thinking Process

identifying directions
and direction symbols,
locating

ordering spatially
describing
measuring
comparing/contrasting
measuring/using a map
scale, solving problems

solving problems
solving problems

Knowledge and Skills

Students will be able to identify compass
directions and apply them.

Students will be able to explain the routes
and time taken to school that they and
their classmates use daily.

Students will read and produce charts and
graphs.

Students will interpret their graphs to
solve problems.

Attitudes and Values

Students will work cooperatively.
Students will realize that sharing
knowledge is mutually beneficial.

LANGUAGE SKILLS

Degree of Formality

informal: casual → consulting

Discourse Tasks

answering questions orally
reading maps, charts, graphs
making a pie graph
filling in charts
writing down the names of streets

Structures

What are the 4 directions?
What is this way called?
How is it written on the map?
Where is Susan's house from Tom's?
Her house is across the street from Tom's.
How do you get to school?
I come by bus/on foot.
How long does it take to get to school?
It takes 10 minutes/5 minutes walking and
20 minutes by bus.
Does it take Mary more or less time than
Tom?
How far do you live from school?
Who lives closest/farthest from school?
Do you take above/below average amount of
time to come to school?
Why do _____ and _____ take the same amount
of time to get to school?
Because they _____.
How could you get to school faster?

LANGUAGE SKILLS Continued)
Vocabulary

points of compass (east, west, north, south, NE, NW, SE, SW)
prepositions - around, down, up, through, by, on, across, next to, along
street, lane, alley, block
go, turn, walk to, go across, get on/off
catch, wait for/at, take/transfer to
first, next, then, after that, finally
add, total, divide, average
more, less, closest, farthest

MATERIALS
Key Visuals

compass
local area maps: large map at front of classroom plus smaller maps for each student, directional symbols, 4 charts, bar graph, pie graph

ACTIVITIES
1

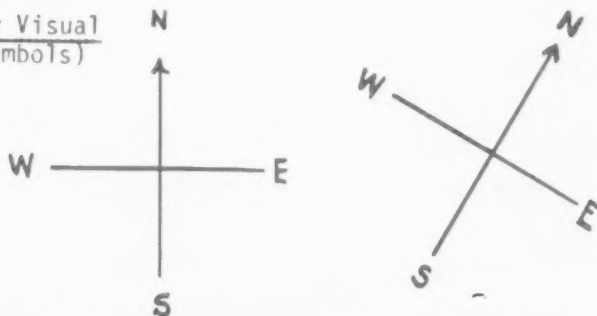
identifying directions
question - answer

Teacher elicits what students know by asking -
What are the four directions? (Use 4
What is this way called? (points of
How is this way written on a (compass.
map?

teaching

Teacher tells class that directions are usually written on maps as:

Key Visual
(symbols)



Teacher locates the directional symbols on the area map, pointing out that it may not run parallel or at right angles to the road network.

Teacher elicits or teaches the four compound directions: NE, NW, SE, SW. Note that in Chinese, they would be EN, WN, ES, WS.

ACTIVITIES (Continued)

2

practising identifying directions and
spatial relations
question - answer

Teacher asks where questions e.g.
Where is Susanna's home from Tom's?
Her home is (direction) of Tom's home
(referring to area map).

3

question - answer

Teacher asks how questions re: travelling
to school.
How do you come/get to school?
Students refer to the area map.

4
(homework)

If the students have great difficulty with
Activity 3, their homework can be to write
down the names of the streets when they go
home that afternoon.

5

question - answer

Teacher asks each student how s/he comes to
school and how long it takes.
How long does it take to come/get to
school?
It takes 10 minutes.
It takes 5 minutes walking and 15 minutes
on the bus.
How do you come/get to school?
I walk./I come on foot.
I bike.
I come in my dad's truck.
By bus.

Answers are listed in the following format.

ACTIVITIES (Continued)
5 (Continued)

Key Visual
(chart)

<u>NAME</u>	<u>METHOD</u>	<u>TIME (minutes)</u>
Gordon	walk	23
Irene	car	13
Sone	walk/bus	2+ 9=11
Dave	bike	35
Tom	walk/bus	3+10=13
Chi Mei	walk	15
Wing Kong	walk	20
Wing Shing	walk	20
Idey	car	15
Cecily	walk	7
Peter	walk/bus	2+8=10
My Lan	walk	25
Susanna	walk/bus	3+20=23
Wally	walk	10

ACTIVITIES (Continued)

6

(follow-up)

reclassifying data: making a new key visual

The teacher guides the students to reclassify the data developed in Activity 5 into a personal table where people are named.

question - answer

Teacher elicits comparisons.

Key Visual

(chart)

<u>TIME (minutes)</u>	<u>NAMES</u>
0-5	
6-10	Cecily, Peter, Wally
11-15	Sone, Irene, Tom, Chi Mei, Idey
16-20	Wing Kong, Wing Shing
21-25	My Lan, Gordon, Susanna
26-30	
31-35	Dave

How long does it take (name) to come to school?

It takes (name) _____ minutes.

Does it take (name) longer than (name) to come to school?

Yes, it does.

No, it doesn't.

They both take the same time.

Who takes more/less time than (name)?

Who takes the most/least time?

Who lives the closest to/farthest from school?

(Answers could lead to another chart with the students listed in rank order.)

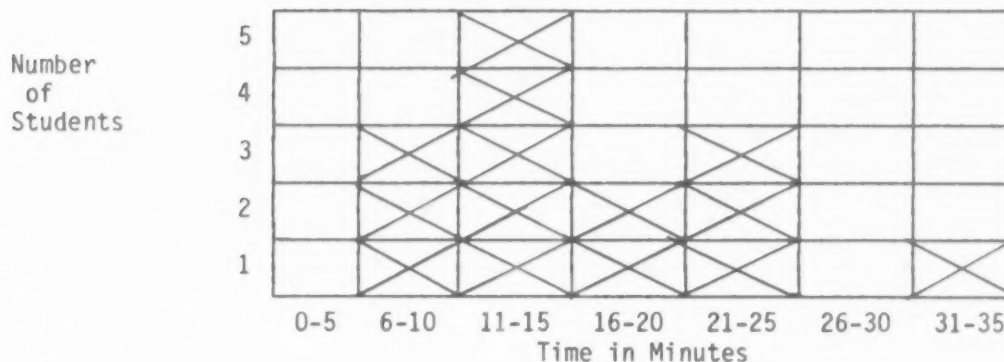
ACTIVITIES (Continued)

7

reclassifying data: making another key visual

The teacher guides the students to revise the key visual data of Activity 6 into an abstract bar graph where times taken are represented by symbols.

Key Visual
(bar graph)



8
(optional)

enriching arithmetic skills: averaging

If students need further challenging, averaging could be introduced at this point.

First total the number of minutes.
=230 minutes

(Numbers are in the Key Visual in Activity 5.)

Next, total the number of students.
= 14 students

Now, divide the number of students by the number of minutes.

$$230 \div 14 = 16.4 \text{ minutes}$$

Therefore, the average amount of time students take coming to school is 16.4 minutes.

Do you take an above average or a below average time to get to school?

How could you get to school faster?

ACTIVITIES (Continued)

9

drawing a pie graph

Teacher builds a pie graph using the data from the Key Visual of Activity 5 on the method of getting to school.

The numbers can be converted to fractions and then multiplied by 360° . Using a compass and a protractor, a true pie graph can be made. To check calculations, the fractions can be converted to percentages.

If this is the students' first experience in making a pie graph, the arithmetic could be simplified. For example, 4 students could be added to the calculations to make a total of 18, which is an easier multiple for working with 360.

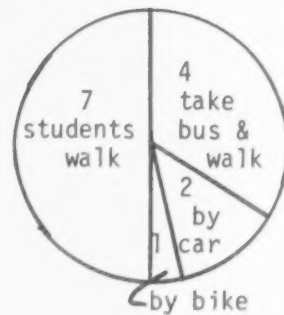
Have students construct their own graphs in their notebooks.

Key Visual (chart)

METHOD	NO. OF STUDENTS	PORTION OF PIE	CHECKING VIA %
walk	$7/14 = \frac{1}{2}$	$1/2 \times 360^{\circ} = 180^{\circ}$	$1/2 = 50.0\%$ half of pie
bus	0		
bus & walk	$4/14 = 2/7$	$2/7 \times 360^{\circ} = 102.8^{\circ}$	$4/14 = 28.6\%$ bigger than $\frac{1}{4}$ pie
car	$2/14 = 1/7$	$1/7 \times 360^{\circ} = 51.4^{\circ}$	$1/7 = 14.3\%$
bike	$1/14$	$1/14 \times 360^{\circ} = 25.7^{\circ}$	$1/14 = 7.0\%$
TOTALS	14	359.9°	99.9%

ACTIVITIES (Continued)
9 (Continued)

Key Visual
(pie graph)



question - answer elicitation

How many come by walking/bus/bus and walking/car/bike?

Seven students walk.

Seven students come by walking.

Seven.

Nobody comes just by bus.

Four students take the bus and walk.

Two students come by car.

One student hikes.

One student comes on a bicycle.

What fraction/percentage of students come to school by walking/by bus/by bus and walking/by car/by bus?

10

reviewing prerequisite math skill, i.e.
changing centimetres to metres
using a map scale

Teacher shows students the 1:2400 notation on area map and explains that one unit of measurement on the map represents 2400 units in reality. Therefore, 1 cm on the map equals 2400 cm or 24 m of actual length.

Using a ruler, students practise measuring different distances, e.g. home to home, home to school, home to shopping, etc.

How far is your home from school?

It is _____ metres.

How far is it from A to B?

It is about _____ metres.

ACTIVITIES (Continued)

11

making a time-distance chart
comparing data

Using the data from Activities 5,6, and 10,
make the following chart.

Key Visual
(chart)

Name	Time	Least Time	Least Distance	Metres	Name
Cecily	7	↑ number of minutes taken to come to school ↓ Most Time	↑ number of metres travelled to come to school ↓ Greatest Distance	400	Cecily
Wally	10			500	Wally
Peter	10			600	Irene
Sone	11			700	Chi Mei
Irene	13			750	Idey
Tom	13			950	Peter
Susanna	23			1000	Wing Kong
Chi Mei	15			1000	Wing Shing
Idey	15			1025	Sone
Wing Kong	20			1100	My Lan
Wing Shing	20			1200	Gordon
Gordon	23			1400	Tom
My Lan	25			1430	Susanna
Dave	35			1800	Dave

EVALUATION

problem-solving

Students must use the information from the
Key Visuals as well as their general
knowledge to solve these problems.

Why do Wing Kong and Wing Shing take the
same time and live the same distance from
school?

Because they are brothers.

Why does Wally take the same time as Peter
but Peter lives almost twice as far away?

Because Peter takes the bus.

Both Gordon and My Lan walk to school.

Gordon lives further away but gets to
school sooner. Why?

Because he walks more quickly.

E.S.L. INSTRUCTION VIA SOCIAL STUDIES

TOPIC

UNIT III - Transportation

OBJECTIVES

Thinking Process

locating, describing,
sequencing

sequencing, predicting

cause and effect reasoning

describing, sequencing,
cause/effect reasoning

solving problems

evaluating

Knowledge and Skills

Students will become familiar with main city arteries and with bus routes to main points of interest.

Students will explain what bus to take where.

Students will be able to use bus stops, transfers and passes appropriately.

Students in pairs will describe a locality depicted on a postcard, will describe the route to get there, and will give reasons why the place is worth visiting.

Attitudes and Values

Students will work cooperatively to read maps and determine routes.

Students will realize which social conventions are acceptable when using public transportation.

LANGUAGE SKILLS

Degree of Formality

informal: casual → consulting

Discourse Tasks

answering questions, describing, and giving reasons orally; map reading

Structures

What bus does Tom take to school?
He takes a #25.

Where does it go?

It goes along Hastings up Commercial, and along Victoria.

How often does the bus come?

How long do you have to wait?

Is the bus usually crowded?

Only in the morning.

Where do you think people are going?

Where do you get on/off the bus?

I walk down Heatley to Hastings, turn right and walk about 20 minutes to the bus stop.

LANGUAGE SKILLS (Continued)
Structures (Continued)

Where is the closest bus stop to _____ ?
It is in front of/across from/next to/etc.

What bus stops at _____ ?

When do you get your transfer?
As soon as you've paid your fare.

How long is it good for?
For about 2 hours.

Where can you use it?
On any route, going any way.

When do you use a transfer?
I use one if I need to change buses.

How many kinds of passes are there?
Two - a school pass for students and a regular city one for everyone.

How much money does the school pass save you?
I save 30 cents a trip.

Where do you have to go to get a regular city pass?
I have to go to the Harbour Centre Mall and have my picture taken.

Is it cheaper using the pass than paying money each time you get on the bus?
Yes, but only if you use it often enough.

How often?
At least twice a day, six days a week.

How do you get to _____ (e.g. Stanley Park, the Stadium) from _____ (your home, school, Hastings and Granville)?

Will you need to transfer? How often?
Where?
Yes/no. Just once/twice. At Broadway and Granville/at Georgia and Richards.

Etc.

Vocabulary

review from Units I and II

MATERIALS

Key Visuals

sample transfers, bus passes
bus maps of city and/or local area
tourist maps showing points of interest
postcards of locality

ACTIVITIES

1

Using local area or city maps, teacher and students trace and describe several bus routes.

2

question - answer

The teacher asks questions to elicit specific information. (See Language Structures section.)

3

samples - transfers, bus passes

Teacher provides sufficient samples for students to become familiar with them.

question - answer

Teacher asks specific questions about transfers, bus passes and their uses. (See Language Structures.)

4

map reading: describing

Using the city wide bus route map and a tourist or visitor's map to the city showing the main interest points, students should be able to describe the route to be taken to specific locations.

EVALUATION

Activity 5

Each pair of students is given a postcard depicting a local point of interest. They must present orally to the class

- a description of the place,
- the bus route from a downtown hotel (using a large map), and
- some reasons for visiting.

Key Visual
(map)

Local Area Map and Bus Routes



E.S.L. INSTRUCTION VIA SOCIAL STUDIES AND MATHEMATICS

TOPIC

UNIT IV - Traffic Flow

OBJECTIVES

Thinking Process

observing, classifying,
counting, tallying

hypothesizing

detecting problems

evaluating evidence

Knowledge and Skills

Students will practise observing, counting,
and recording traffic flow of various
kinds of vehicle.

Students will hypothesize about traffic
flow.

Attitudes and Values

Students will become aware of the impact
of traffic on a neighbourhood.

Students will realize the responsibility
of individual citizens with regard to
traffic.

LANGUAGE SKILLS

Degree of Formality

informal/formal:

casual, consulting, detached

Discourse Tasks

answering questions orally

reading map of intersection

tallying the 'Traffic Count' sheet

filling in and discussing the 'Traffic
Chart'

Structures

Which direction(s) can an (east bound)
vehicle travel?

Which directions can an (east bound)
vehicle turn?

Where are the best locations for observing
traffic?

How many students should observe in one
place?

Who counted the most/the greatest number of
vehicles/cars/vans?

Would there be times during the day when
there would be less/lighter traffic/fewer
vehicles?

Estimate how many vehicles went east
between 8:00 AM and 9:00 AM.

Vocabulary

review directions, intersection, corners of
intersection

vehicles - car, truck, van, bus

traffic - heavy, light, moderate

tally, count, record, hypothesize

MATERIALS

Key Visuals

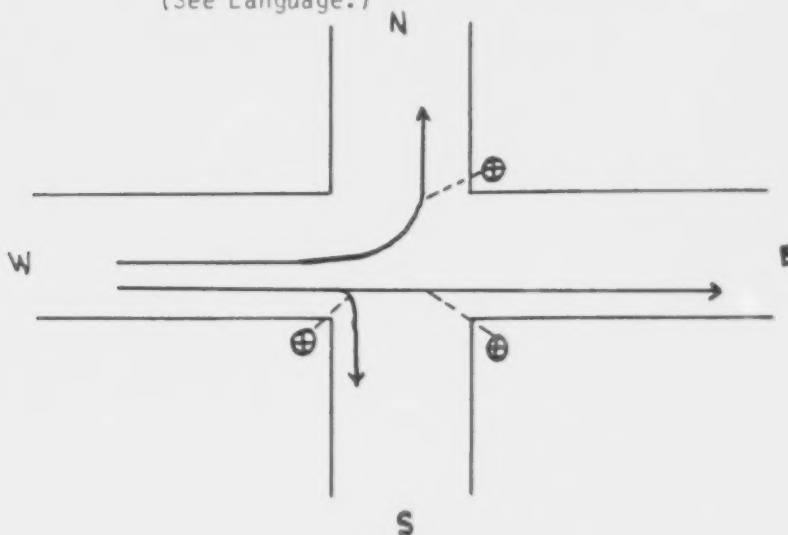
maps of intersection - 1 copy each
traffic count sheets
traffic charts
magazine pictures of types of vehicles
with labels

ACTIVITIES

1

question - answer

Teacher draws on board sketch map of a busy intersection near the school and labels the directions and the streets. Teacher asks questions to prepare students for counting traffic e.g. Which direction can a northbound vehicle turn? etc. (See Language.)



Since the number of possibilities that a car can travel total 12, 12 recorders are needed.

There will be 3 students on each corner, all recording different movements.

Teacher explains a tallygram (||||, ||||, 11) and hands out a Traffic Count Sheet to each student. Teacher makes sure that every student is familiar with the kinds of vehicles listed. (Magazine pictures would be useful as a check.)

Out of Class

Teacher accompanies students to intersection to make count and fill in sheet.

Key Visual

<u>Traffic Count Sheet</u>				
Name(s): _____				
Date: _____		Time: _____		
Intersection: _____				
Direction: (from) _____ (to) _____				
<u>Type</u>				
Car	Truck	Bus	Motorcycle	Van
Totals				

ACTIVITIES (Continued)

2

Filling in Chart

Back in class, teacher hands out the TRAFFIC CHART. Students report their count and fill in the sheet. Teacher elicits specific information by asking questions such as

Mei Ling, what direction were your vehicles travelling from/to?

What was your total count?

How many motorcycles did you see?

FINAL TOTAL

Students practise their row and column totals.

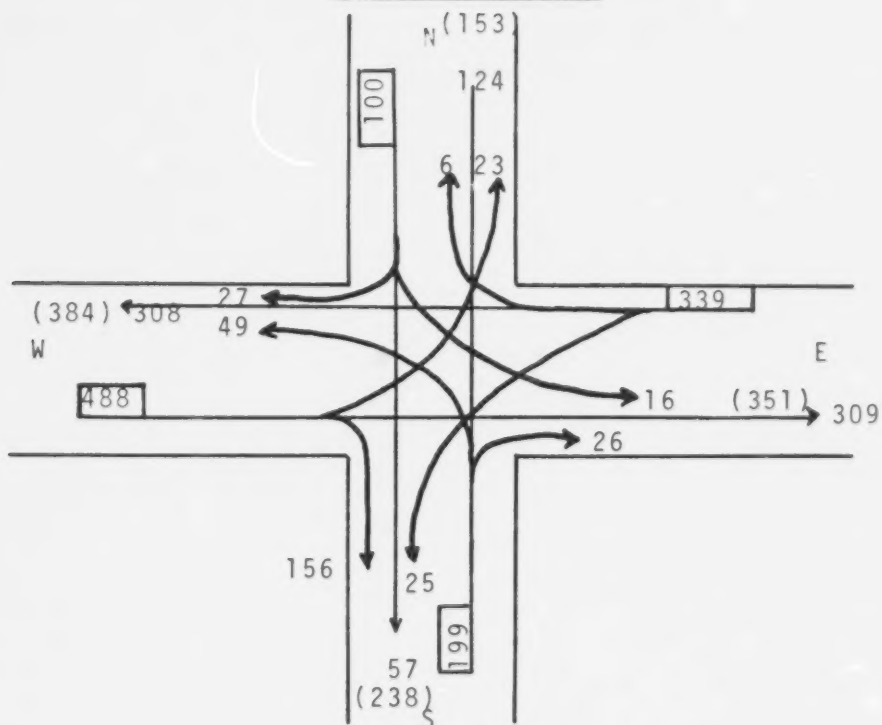
Students transfer totals from the chart to the map of the intersection. Refer to the key visuals on the next page.

Key Visuals

TRAFFIC CHART

From	To	Name	Car	Truck	Bus	Motorcycle	Van	Totals
N	E	ML+Ir	10	4	0	0	2=	16
	W	Cec	18	2	0	0	7=	27
	S	Peter	10	26	0	0	21=	57=
100								
S	N	Tom	80	19	0	2	23=	124
	W	Sone	35	1	1	0	12=	49
	E	Dave	18	4	0	0	4=	26=
199								
W	E	Gord	255	21	0	3	30=	309
	N	WK	14	5	0	0	4=	23
	S	Harry	120	9	4	0	23=	156=488
E	W	WS	279	15	1	4	9=	308
	N	S+CM	4	1	0	0	1=	6
	S	Nel	17	4	0	0	4=	25=
339								
<u>Totals</u>			860	111	6	9	140=	1,126=
1,126								

MAP OF INTERSECTION



ACTIVITIES (Continued)

calculating traffic flow

Using the traffic chart, students calculate how many vehicles would enter the intersection in (a) an hour, (b) a second.

- a) 1200 in 20 minutes
3600 in 1 hour
- b) 60 seconds = 1 minute
60 minutes = 1 hour
3600 seconds = 1 hour + 3600 vehicles
= 1 vehicle per second

Teacher asks questions such as

Would there be times when traffic is heavy/light?

When are rush hours? Why?

What days are workdays?

Hypothesize:	6 - 7 AM	3000
	7 - 8	4000
	8 - 9	3800
	9 -10	3600
	10-11	3000
	11-12 PM	3400
	12- 1	3200
	1 - 2	3200
	2 - 3	3600
	3 - 4	4000
	4 - 5	4000
	5 - 6	4000
	6 - 7	3200
		<u>48000</u>

EVALUATION

Activity 4

problem-solving

Using chart, estimate how many vehicles use this intersection from 6 AM - 7 PM every workday.

Estimate the weekend traffic during the same hours.

How many vehicles probably use this intersection during a 7 day week?

E.S.L. INSTRUCTION VIA CONSUMER EDUCATION AND SOCIAL STUDIES

TOPIC

UNIT V - Shops/Stores

OBJECTIVES

Thinking Process classifying

classifying
cause/effect reasoning

concluding, evaluating

Knowledge and Skills

Students will become aware of what goods and services are (not) available in their neighbourhood.

Students will classify retail outlets.
Students will realize the extent and/or limitations of their neighbourhood.

Attitudes and Values

Students will appreciate the services available to them.

LANGUAGE SKILLS

Degree of Formality

informal: casual → consulting

Discourse Tasks

filling in retrieval sheets
optional: interviewing workers and managers
answering questions orally
discussing community and commercial needs

Structures

What did you buy?
Where did you buy it?
How much did you spend?
When did you buy it?
Special habitual use of the present tense
What kind of work do you do?
How many people do you employ?
Do you offer credit?
Why do you shop there?

See also the Language Structures used in the Key Visuals. If the students interview workers and managers, they will need to prepare questions and social gambits.

Vocabulary

names of stores: shoe store, upholstery shop, restaurant, etc.
expensive, cheap, good quality
prepositions: near, close to, next to, across from, etc.
shop, buy, sell, exchange, charge, bank, visit, employ, advertise
reasons, because
one-stop shopping, friendly service

MATERIALS

References

Shopping Centres. Vancouver Environment Education Project. VEEP, University of British Columbia, 1972.

Exploring Stores. Western Education Development Group for Ministry of Consumer and Corporate Affairs. WEDGE 1981.

Community Studies for Community Schools,
Vancouver Environment Education Project.
VEEP, University of British Columbia,
1975.

Key Visuals

block survey and outlet survey retrieval
sheets from Community Studies for Commu-
nity Schools or devised by the teacher.

classification chart of outlets
job description chart
shopping survey retrieval sheets

ACTIVITIES

1

survey

Students do a block survey where there are a number of stores and shops (Community Studies for Community Schools p.18).

(Note - Local area stores, shops and offices have already been identified in a previous lesson.)

Students record information such as

- the date
- the time of day
- the address of the block
- the stores on the block
- the bus stop location
- the parking meters
- the parking restrictions
- the number of cars parked
- the number of pedestrians

Students then draw the block that they survey, labelling the streets, shops and offices on their drawing.

2

detailed survey of each outlet in Activity 1 (Community Studies for Community Schools pp.19-20)

Students record information such as

- the name of the outlet
- the frontage it has
- its hours of business
- whether the outlet
 - sells things
 - makes/sells things
 - services
 - offers recreation
- how the outlet advertises and displays goods/services
- a 10-minute count of customers
- the special services offered
- any parking benefits

ACTIVITIES (Continued)

3

Classification of outlets into 4 groups:

Key Visual Places which

Sell Things	Make/Sell Things	Offer Services	Offer Recreation
clothing store hosiery store shoe store millinery shop fabric store furniture store hardware store appliance store grocery store drugstore supermarket music store	tailor's drapery store arts & crafts shop bakery candy store restaurant café florist/flower shop camera shop	gas station dentist's office bank real estate agency upholstery shop repair shop travel agency cleaner's barber shop beauty salon doctor's office	theatre cinema bowling alley pool hall community centre ice/roller rink curling rink

4

job descriptions

In pairs, students visit one or more stores. Their assignment is to identify as many workers as possible and the specific jobs they do. They fill in the following chart with the information. If feasible, the workers/manager could be interviewed.

Key Visual

Job Description Chart		
Place	Worker	Jobs/Tasks

5

reporting back

Pairs report back to the class describing the place of business visited and summarizing the observations or interviews.

ACTIVITIES (Continued)

6

shopping survey

Students are each given a retrieval sheet on which they indicate their purchases for the last week.

Key Visual

SHOPPING SURVEY

What? purchase	Where? name of store	Where? location	Where? distance from home	How much? cost	When? date	Why? reasons for using this store *
for example shoes	shoe store	Hastings	3 km	\$24.95	Saturday	Reason #1,3,4

*See reasons #1-12 below.

My reasons for using a particular store:
1) The store is near my home. 2) The store is on my way home. 3) The storekeepers speak my first language. 4) The prices are cheaper here. 5) I can only buy the items here. 6) This store has specials/sales/discounts. 7) The things are good quality. 8) The store has one-stop shopping. 9) The store gives friendly service. 10) The store has a large selection. 11) The store gives credit. 12) The store is handy if I forget to buy things elsewhere.

7

shopping habits survey

To find out which of the following can be purchased or obtained within the neighbourhood and where, students can complete the following retrieval sheet.

Shopping Habits Retrieval Sheet

Student _____ Address _____

	Can goods/ services be purchased within your community	Location/ Where	Time in minutes from your home
1. Fresh produce	Yes	Corner store	3 minutes
2. Milk and butter			
3. Meat			
4. Specialty foods: cakes, cheese, breads			
5. Dresses			
6. Shoes			
7. Children's wear			
8. Underwear			
9. Men's suits			
10. Garden equipment			
11. Lumber supplies			
12. Furniture			
13. Cars			
14. Sporting goods			
15. Ice skating			
16. Bowling			
17. Swimming			
18. Pub			
19. Movie			
20. Less expensive restaurant			
21. Special dinner			
22. Museum			
23. Gas station			
24. Doctor/dentist			
25. Hospital			
26. Post office			
27. Insurance			
28. Bank			
29. Lawyer			
30. Travel agency			
31. Prescriptions			
32. Jewelry			
33. Dry cleaning			
34. Records			
35. Stereos			
36. Second-hand clothing/ furniture store			

EVALUATION

8

Students in small groups (3-4) study each other's retrieval sheets and fill in the following chart.

Key Visual

Goods/
Services

Goods/
Services

Bought Locally	Reason	Bought Elsewhere	Reason

Teacher makes a master chart at the front of the room on which each group records its information. Class studies chart and discusses whether or not local stores, offices, services, recreation facilities are meeting community needs. There could be a great deal of follow-up written work from this lesson, perhaps to be shared with some of the local merchants.

This follow-up work will provide more opportunities to discuss the community and thereby to review and consolidate the vocabulary and structures needed.

E.S.L. INSTRUCTION VIA FOODS AND NUTRITION

SEVEN SAMPLE LESSONS

GOALS FOR UNIT

- Students will experience Canadian foodstyles and will thereby learn about one aspect of Canadian culture.
- Students will develop a fundamental understanding of nutrition.
- Students will learn language and measurement skills useful in daily life and in academic areas (food science, science, mathematics, social studies).
- Students will use informal and formal styles of language appropriately.
- Students will be motivated to learn cooking and language skills so that they can prepare food and enjoy it.
- Students will cooperate, will work cohesively in their kitchen units, and will observe careful management practices.

SELECTED TOPICS FROM UNIT

Lesson 2	Fruit Salad
3	Nutrition and Canada's Food Guide
4	Vegetable Classification and Vegetable Soup Demonstration
5	Vegetable Soup Lab
10	Chocolate Chip Cookies Demonstration
11	Chocolate Chip Cookie Lab
12	Dad's Cookie Lab

ACKNOWLEDGEMENT

These lessons were devised by DENISE LOUIE while student teaching at Killarney Secondary School in Vancouver.

Note:

This unit was designed for secondary school students as an orientation to the use of a Home Economics Lab. However, the material is easily adapted to other situations. Some teachers field-tested the lessons with primary E.S.L. children, adjusting the vocabulary and the written tasks to accommodate age and language level.

UNIT: E.S.L. INSTRUCTION VIA FOOD AND SCIENCE

Sample Lesson 2

TOPIC

Fruit Salad

OBJECTIVES

Thinking Process

identifying, labelling

following instructions

following instructions

identifying

ordering spatially

Knowledge and Skills

1. Given fruit, the student will be able to identify the fruit which will be used in a fruit salad.

2. Given fruit, the student will be able to prepare it for a fruit salad following a poster size Fruit Salad recipe.

3. Given instructions on setting a table, the student will be able to set a table which is suitable for serving fruit salad.

LANGUAGE SKILLS

Degree of Formality

informal: consultative —————→ casual

Discourse Tasks

answering questions orally

naming fruits in writing

reading recipe accompanied by demonstration

"small" talk accompanying preparation of food and eating

Structures

nouns: plural - knife knives

peach peaches

indefinite article: an apple

an apple
an orange

adjectives: demonstrative -

This is a pear.

These are pears.

This belongs to the fruit and vegetable group.

These belong to the fruit and vegetable food group.

That belongs to the fruit and vegetable food group.

Those belong to the fruit and vegetable food group.

An apple has seeds.

An orange has _____.

A plum has a pit.

A peach has a _____.

Vocabulary

fruit: pit, core, stone

utensils: paring knife, chopping board,

bowl, can opener, wooden spoon

table/place setting: placemat, teaspoon,

dish, napkin

action verbs: cut, peel, chop, mix

MATERIALS

fruit:

1 can sliced pineapple, 3 oranges, 3 apples
(red, yellow, and green), 3 bananas,
2 peaches, small bunch of grapes, 2 plums

food:

miniature marshmallows

utensils:

paring knife, chopping board, can opener,
bowl, wooden spoon

table/place setting:

place mat, teaspoon, dish, napkin

Key Visuals:

poster size fruit salad recipe

fruit pictures from Peabody Kit

fruit pictures from B.C. Dairy Foundation

TEACHER ACTIVITY	STUDENT ACTIVITY
I. Introduction - Review last class. Ask questions orally.	Answer questions orally.
II. Content - 1. Identify the fruit. Use both pictures and actual fruit. Display the fruit and instruct students to identify each fruit in writing. 2. Demonstrate how to prepare fruit for a fruit salad following poster size recipe: an apple to show core, a plum to show pit, and a banana. These 3 fruits show different types of peeling and cutting. 3. Go through all steps of Fruit Salad recipe with students following poster size recipe. KEY?= What should you use to open a can of pineapple? What do you use to peel an apple? a banana? What is a chopping board used for? What is a table setting? 4. Instruct 3 students from each unit to prepare one fruit for the communal fruit salad and instruct 1 person to set the unit's table. 5. Mix all prepared fruit in one bowl with marshmallows and divide salad amongst the units. 6. Check clean up. III. Summary - KEY?= What is a fruit salad?	Look at fruit on display and write down the name of each fruit. Listen to instructions. Listen to instructions. Answer questions orally. Prepare a fruit for the salad or set the table. Place salad into each dish. Eat. Clean up. Answer questions orally.

EVALUATION

Note oral feedback when students answer questions, prepare fruit, set the table.
Conduct review next class based on this lesson.

UNIT: E.S.L. INSTRUCTION VIA FOODS AND SCIENCE

Sample Lesson 3

TOPIC

Nutrition and Canada's Food Guide

OBJECTIVES

Thinking Process

describing, defining

classifying
cause/effect reasoning

describing
analyzing

labelling
defining

Knowledge and Skills

1. Given a discussion on nutrition, the student will be able to orally describe what nutrition is in order to understand its importance to the body.
2. Given a discussion on nutrition and a handout, the student will be able to list, orally or in writing, nutrients and their function and source.
3. Given a discussion on Canada's Food Guide, the student will be able to orally explain what it is and its relationship to nutrition.
4. Given nutrition words, the student will be able to discuss nutrition concepts.

LANGUAGE

Degree of Formality

Discourse Tasks

Structures

Vocabulary

formal/informal:

consulting → detached → casual
answering questions orally
reading detailed charts
discussing nutrition, nutrients, Canada's Food Guide

classifying food groups in writing

wh - questions

statements which label:

This is bread.

statements which classify:

Butter is a milk product.

causal structures:

Carbohydrates give energy.

Iron helps cells use oxygen.

carbohydrate, fat, vitamin, mineral,
protein, energy, hemoglobin, poultry,
alternative, adolescent, moderate,
nursing, pregnant, lean, serving

MATERIALS

Key Visuals

- #1 *nutrient handout
- #2 & Canada's Food Guide handouts
- 3 (Health and Welfare Canada)
- #4 food group worksheets
- #5 food pictures from 4 food groups: various sources

*Not provided here. One source is Helen Kowtaluk Discovering Food, revised edition. Charles A. Bennett & Co., 1982, p.11.

Key Visual 1	Nutrient Handout
*The handout should display information under these categories.	
What Nutrients Do	Food Sources
CARBOHYDRATES	
.	
.	
FATS	
.	
.	
PROTEINS	
.	
.	
.	
VITAMINS	
Vitamin A	
.	
.	
.	
Vitamin B	
.	
.	
.	
Vitamin C	
.	
.	
.	
MINERALS	
Calcium	
.	
.	
.	
Iron	
.	
.	

KEY VISUAL 2 The original guide is in colour. Canada's Food Guide

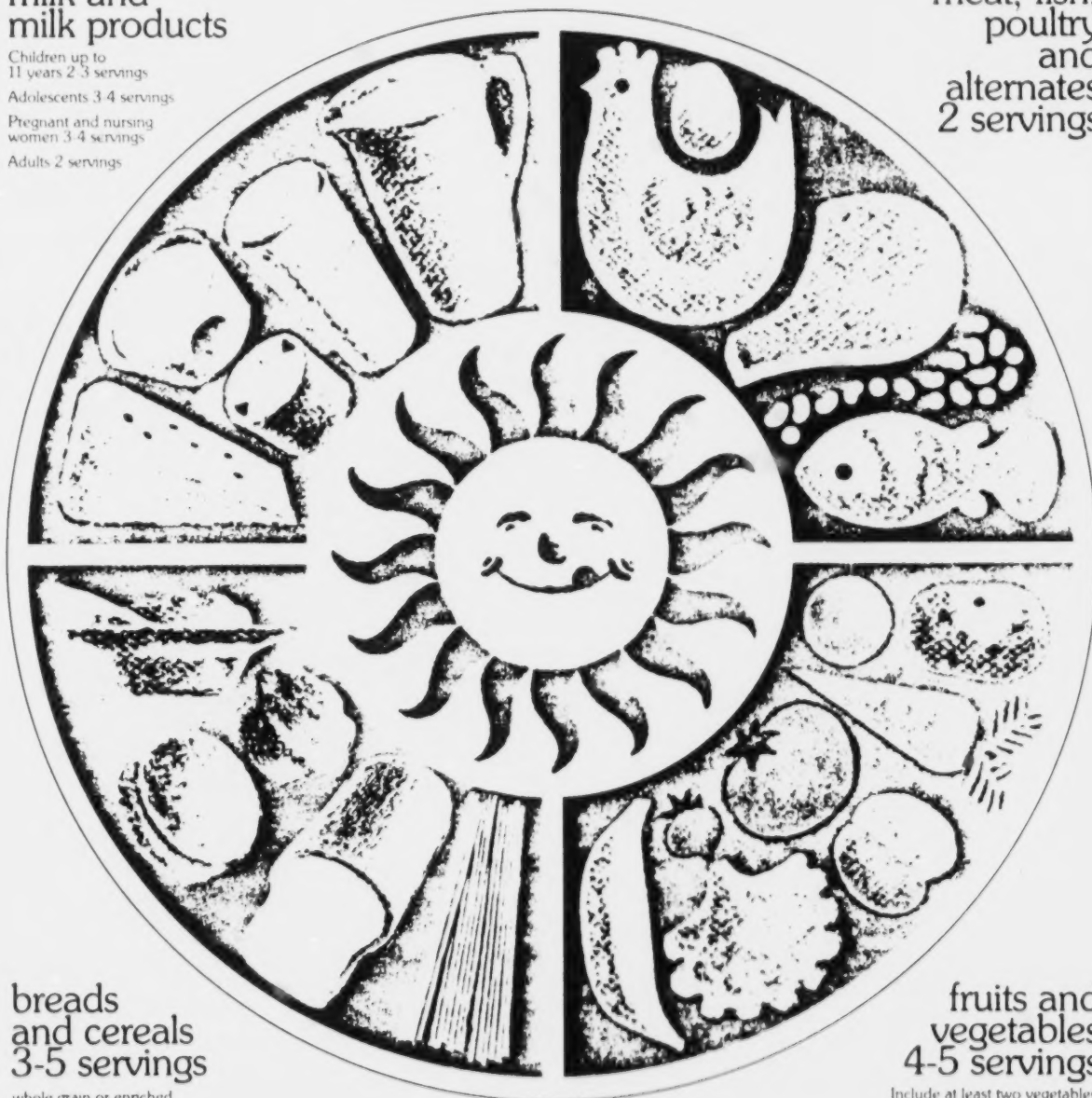
Eat a variety of foods from each group every day

milk and milk products

Children up to 11 years 2-3 servings
Adolescents 3-4 servings
Pregnant and nursing women 3-4 servings
Adults 2 servings

meat, fish, poultry and alternates

2 servings



bread and cereals

3-5 servings

whole grain or enriched

fruits and vegetables

4-5 servings

Include at least two vegetables

-104-



Health
and Welfare
Canada

Santé et
Bien-être social
Canada

Canada

KEY VISUAL 3 The original is in colour.

Canada's Food Guide

Variety

Choose different kinds of foods from within each group in appropriate numbers of servings and portion sizes

Energy Balance

Needs vary with age, sex and activity. Balance energy intake from foods with energy output from physical activity to control weight. Foods selected according to the Guide can supply 4000 – 6000 kJ

Moderation

Select and prepare foods with limited amounts of fat, sugar and salt. If alcohol is consumed, use limited amounts

milk and milk products

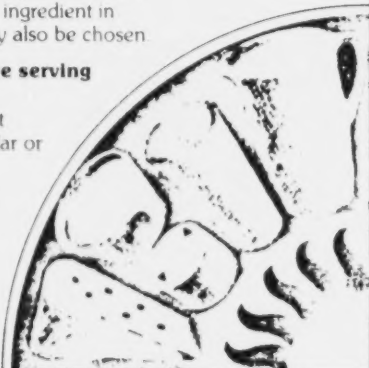
Children up to 11 years	2-3 servings
Adolescents	3-4 servings
Pregnant and nursing women	3-4 servings
Adults	2 servings

Skim, 2%, whole, buttermilk, reconstituted dry or evaporated milk may be used as a beverage or as the main ingredient in other foods. Cheese may also be chosen

Some examples of one serving

250 mL (1 cup) milk
175 mL (¾ cup) yoghurt
45 g (1½ ounces) cheddar or process cheese

In addition, a supplement of vitamin D is recommended when milk is consumed which does not contain added vitamin D

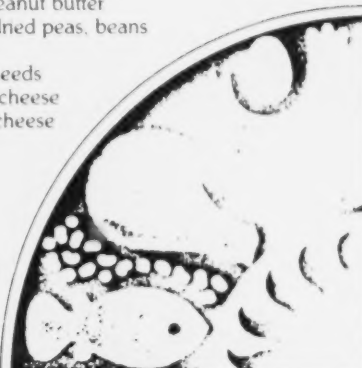


meat, fish, poultry and alternates

2 servings

Some examples of one serving

60 to 90 g (2-3 ounces) cooked lean meat, fish, poultry or liver
60 mL (4 tablespoons) peanut butter
250 mL (1 cup) cooked dried peas, beans or lentils
125 mL (½ cup) nuts or seeds
60 g (2 ounces) cheddar cheese
125 mL (½ cup) cottage cheese
2 eggs



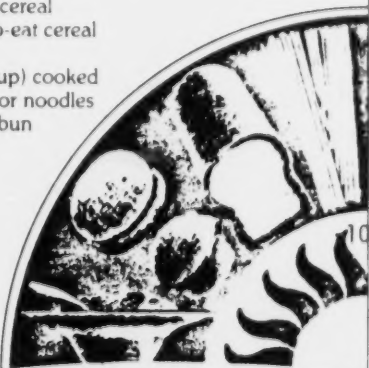
bread and cereals

3-5 servings

whole grain or enriched. Whole grain products are recommended

Some examples of one serving

1 slice bread
125 mL (½ cup) cooked cereal
175 mL (¾ cup) ready-to-eat cereal
1 roll or muffin
125 to 175 mL (½ – ¾ cup) cooked rice, macaroni, spaghetti or noodles
½ hamburger or wiener bun



fruits and vegetables

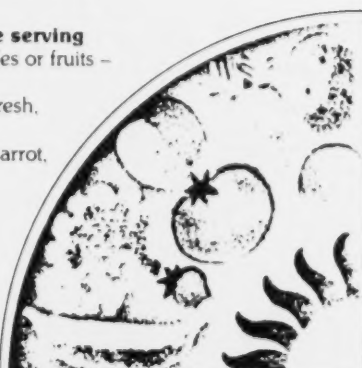
4-5 servings

Include at least two vegetables

Choose a variety of both vegetables and fruits — cooked, raw or their juices. Include yellow, green or green leafy vegetables.

Some examples of one serving

125 mL (½ cup) vegetables or fruits — fresh, frozen or canned
125 mL (½ cup) juice — fresh, frozen or canned
1 medium-sized potato, carrot, tomato, peach, apple, orange or banana



Key Visual 4

E.S.L. FOODS WORKSHEET

NAME _____

1. Name the food in each picture and write the name down in the correct food group.

<u>milk and milk products</u>	<u>meat, fish and poultry</u>	<u>bread and cereals</u>	<u>fruits and vegetables</u>

2. Put the words you have written in each food group in alphabetical order.*

<u>milk and milk products</u>	<u>meat, fish and poultry</u>	<u>bread and cereals</u>	<u>fruits and vegetables</u>

*This task may be changed to:
Write down the names of the foods in each food group that you have tried in Canada.
OR
Write down the names of the foods in each food group that you like.
Alphabetical order may not be a major skill to be worked on in this context.

<u>TEACHER ACTIVITY</u>	<u>STUDENT ACTIVITY</u>
I. Introduction - review on fruit salad KEY?= What is a fruit salad? Did you like the fruit salad? Why or why not? Who prepared the peach, apple _____? How did you prepare the peach, apple _____? What utensils did you use to prepare the peach, apple _____? What type of spoon did you eat the salad with? Who set the table? Where are the teaspoons, place mats _____? What as the very last step in making the fruit salad? How are a plum/apple, grape, orange, banana/apple, peach/plum alike? different? What are other ways fruits are prepared for eating besides salad?	Answer questions orally.
II. Content 1. Nutrition KEY?= What is nutrition? a) Discussion on nutrition and nutrients using nutrition handout. (Key Visual 1) KEY?= How do(es) fat, vitamins help you? Where can you find fat, vitamin A _____? b) Discussion on Canada's Food Guide and its relationship to nutrition using Canada Food Guide handouts. (Key Visuals 2 and 3) 2. Distribute food pictures to each unit and hand out food groups worksheet. (Key Visual 4) a) Instruct students to match pictures of food to a food group based on Canada's Food Guide and write name of food on worksheet. b) Instruct students to do second part of worksheet, if time permits.	Answer questions orally. Read handout. Read two colourful Guides. Match food pictures to food groups and write name of foods on worksheet.
III. End - Announce next class lesson on vegetable soup.	Listen.

EVALUATION Note feedback when students answer questions orally and work on food groups worksheet.

UNIT: E.S.L. INSTRUCTION VIA FOODS

Sample Lesson 4

TOPIC

Vegetable Classification and Vegetable Soup Demonstration

OBJECTIVES

Thinking Process
noting a process

sequencing
following instructions
locating

classifying
cause/effect reasoning

identifying

Knowledge and Skills

1. Given a cooking demonstration, the student will be able to record procedures for making vegetable soup following a structured note sheet. Given a cooking demonstration, the student will be able to make vegetable soup using a structured note sheet s/he has written.
2. Given a discussion on vegetables, the student will be able to classify vegetables, orally, according to the part of the plant it comes from using a handout.
3. Given specific vocabulary, the student will be able to identify vegetables on a handout and make vegetable soup.

LANGUAGE SKILLS

Degree of Formality

Discourse Tasks

Structures

Vocabulary

informal/formal:

consulting → detached → casual

answering/asking questions
reading vegetable classification handout
and explaining it
taking notes using a structured recipe sheet
following the recipe
noting a process

statements of definition:

Nutrients are elements like fats,
carbohydrates, proteins, vitamins, and
minerals which nourish.

Calories are _____ which _____.

time + imperatives:

First, put the water in the pot.

Second, _____.

food: produce, calories, stem, fruit,
leaf, seed, bulb, tuber, root,
flower, chicken cube, macaroni,
parsley

utensils: liquid measuring cup, vegetable
peeler, utility plate

verbs: boil, simmer

MATERIALS

produce advertisements

Key Visuals

- #1 vegetable classification handouts
- #2 poster size Vegetable Soup recipe
- #3 vegetable soup structured notesheets

utensils: small bowls, large pot and lid, large liquid measuring cup, metal spatula, measuring spoons, vegetable peeler, large knife, wooden spoon, chopping board

food: pepper, chicken cube, salt, carrot, potato, celery, parsley, macaroni, tomato, peas, corn

place setting: soup bowls, soup spoon, napkin, place mat, salt/pepper shakers

Key Visual 1

VEGETABLE CLASSIFICATION HANDOUT

Vegetables are classified according to the parts of the plant from which they come. The drawing below shows the parts of plants which are used for vegetables. No one plant will have all of these parts. Usually, only one, perhaps two, parts of a plant are eaten. For example, only the seeds are eaten from the corn plant.

Fruits

Fruits have a high water content. They are low in calories.

Examples: cucumber, eggplant, okra, pepper, squash

Flowers

Flowers have a high water content. They are lower in calories.

Examples: broccoli, cauliflower

Seeds

Seeds store food. They are high in

starch and higher in calories. Examples: beans, corn, peas

Leaves

Leaves have a high water content. They are low in calories.

Examples: brussels sprouts, cabbage, collard greens, dandelion greens, kale, lettuce, mustard greens, spinach

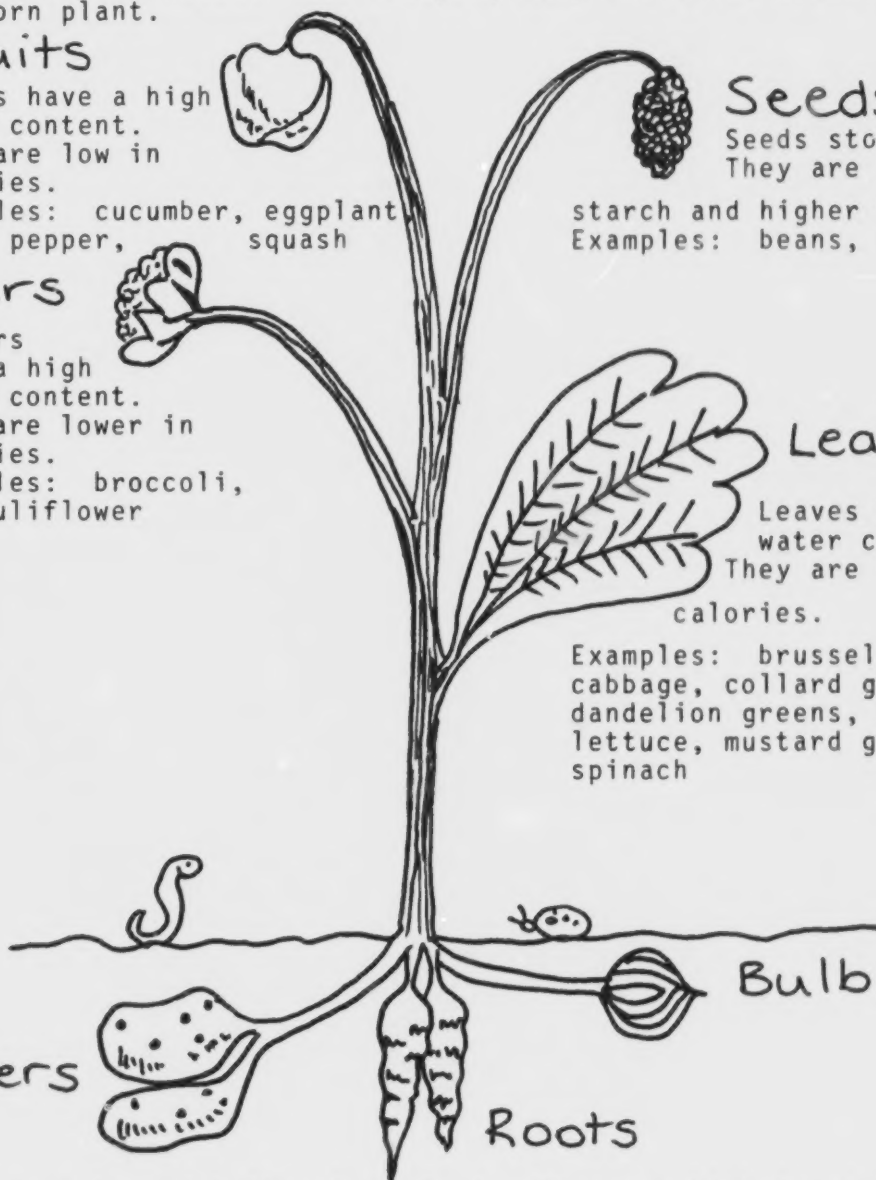
Bulbs

Tubers

Roots

Tubers, roots and bulbs store food. They are high in starch and higher in calories.

Potatoes are tubers. Beets, carrots, radishes, rutabaga, and turnips are roots. Onions and garlic are bulbs.



VEGETABLE SOUP

1. Wash hands, put on apron, tie back hair and roll up sleeves.

2. Collect all utensils to make vegetable soup:

- | | |
|---------------------------------|-----------------------------------|
| 1. large pot with lid | from cupboard # 12 |
| 2. largest liquid measuring cup | from cupboard # 3 |
| 3. dry measuring cups | from cupboard # 3 |
| 4. 3 small bowls | from cupboard # above the counter |
| 5. metal spatula | from drawer # 7 |
| 6. measuring spoons | from drawer # 7 |
| 7. vegetable peeler | from drawer # 7 |
| 8. large knife | from drawer # 7 |
| 9. wooden spoon | from drawer # 7 |
| 10. cutting board | hanging up by the sink |

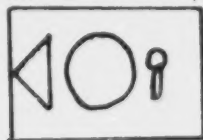
3. Collect all ingredients for vegetable soup on a utility plate from cupboard # 3:

- | | |
|----------------------------|--------------------------|
| 1 chicken cube | 1 small piece of parsley |
| 1 mL salt | 100 mL macaroni |
| 600 mL water | 1 tomato |
| 1 small carrot | 50 mL peas |
| $\frac{1}{2}$ potato | 25 mL corn |
| $\frac{1}{2}$ celery stalk | |

4. Make the soup:

1. Put the chicken cube, salt, and water into the pot.
2. Put the pot on a burner and turn the heat onto high.
3. When the water boils, turn the heat down to low.
4. Put the lid on the pot.
5. Peel carrots and potatoes with a vegetable peeler on garbage paper. Cut them into small pieces with large knife and add them to the pot.
6. Wash the celery and parsley. Chop them into small pieces with large knife and add them to the pot.
7. Chop the tomato with large knife and add it to the pot with its juice.
8. Add the macaroni to the pot.
9. Turn the heat up to high and bring the soup to a boil, then turn the heat down to low.
10. Simmer the soup for 15 minutes or until the vegetables are soft.
11. Turn the heat to high again and add peas and corn. Bring the soup to a boil.
12. Serve immediately using a wooden spoon.

***** While the soup is cooking set the table:



placemat
soup bowl
napkin (serviette)
soup spoon
salt & pepper shakers

***** While the soup is cooking, start cleaning up:

A is Special Duties B is Dishwasher C is Dishdryer D is Housekeeper

VEGETABLE SOUP

1. Wash hands, put on apron, tie back hair and roll up sleeves.

2. Collect all utensils to make vegetable soup:

- | | |
|-----------|-----------------------|
| 1. _____ | from cupboard # _____ |
| 2. _____ | from cupboard # _____ |
| 3. _____ | from cupboard # _____ |
| 4. _____ | from _____ # _____ |
| 5. _____ | from drawer # _____ |
| 6. _____ | from drawer # _____ |
| 7. _____ | from drawer # _____ |
| 8. _____ | from drawer # _____ |
| 9. _____ | from _____ # _____ |
| 10. _____ | hanging _____ |

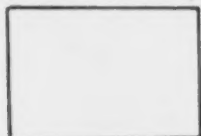
3. Collect all ingredients for vegetable soup on a utility plate from cupboard # _____

- | | |
|--------------------|------------------------------|
| _____ chicken cube | _____ small piece of parsley |
| _____ salt | _____ macaroni |
| _____ water | _____ tomato |
| _____ small carrot | _____ peas |
| _____ potato | _____ corn |
| _____ celery stalk | |

4. Make the soup:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

***** While the soup is cooking set the table:



placemat
soup bowl
napkin (serviette)
soup spoon
salt & pepper shakers

***** While the soup is cooking, start cleaning up:

A is Special Duties B is Dishwasher C is Dishdryer D is Housekeeper

TEACHER ACTIVITY	STUDENT ACTIVITY
I. Introduction - review on nutrition KEY?=What is nutrition? What are nutrients? Name them.	Answer questions orally.
II. Content - Why is Canada's Food Guide important? What is poultry?	
1. Produce KEY?=What is produce? Explain produce showing supermarket advertisements.	Answer questions orally. Observe advertisements.
2. Vegetable Classification Explain vegetables in terms of classification using handout (Key Visual 1). KEY?=What are calories? Why are seeds high in calories? What other vegetables are high in calories? Why are fruits low in calories? What other vegetables are low in calories?	Read handout. Answer questions orally using handout.
3. Vegetable Soup Demonstration a) Go through demonstration step by step following structured recipe sheet (Key Visual 3). i. KEY?=What should you do to prepare yourself for cooking? ii. Collect utensils for soup with emphasis on utensil location and new word, <u>utility plate</u> . KEY?=Where is the <u>metal</u> spatula kept? ...Chopping board? iii. Collect ingredients, describing mL, macaroni, and chicken cube. KEY?=What part of a plant does a carrot...does parsley...come from? Is it high or low in calories?	Observe. Answer questions orally. Take notes using structured recipe sheet.

<u>TEACHER ACTIVITY</u>	<u>STUDENT ACTIVITY</u>
iv. Go over directions on making the soup which are written on a poster and covered with strips of paper to reveal only one step at a time. Explain word: <u>simmer</u>. KEY?=What do you think I should do first to make the soup? second?...third?... b) Go over table setting. c) Assign clean up duties. III. End - Announce that the unit will make the soup together next class.	Listen.

EVALUATION

Note oral feedback when observing students' lab performance next class.

UNIT: E.S.L. INSTRUCTION VIA FOODS

Sample Lesson 5

TOPIC

Vegetable Soup Lab

OBJECTIVES

Thinking Process

labelling, identifying,
measuring, following
instructions, noting a
process
following instructions
labelling
ordering spatially

following instructions
solving problems

Knowledge and Skills

1. Given a cooking demonstration last class, the student will be able to make vegetable soup using a structured recipe sheet s/he has written.
2. Given instructions on setting a table, the student will be able to set a table which is suitable for serving vegetable soup.
3. Given directions on cleaning up, the student will be able to clean up his/her unit based upon assigned clean up duty.

LANGUAGE SKILLS

Degree of Formality

informal/formal:

casual → consulting → detached

Discourse Tasks

answering/asking questions
talking accompanying cooking
chat
following a recipe
reading and discussing cooking tips

Structures

imperative verbs: put, peel, wash, chop,
add, turn, simmer, serve
When _____, then do _____.

Vocabulary

recall names for
ingredients
utensils
actions

MATERIALS

food

4 chicken cubes, 4 small carrots, 2
potatoes, 2 celery stalks, bunch parsley,
small box macaroni, small tin tomatoes,
small can corn, small package peas

Key Visual

worksheet with recipe filled in during
Lesson 4

VEGETABLE SOUP

(Student Copy)

1. Wash hands, put on apron, tie back hair and roll up sleeves.

2. Collect all utensils to make vegetable soup:

- | | |
|-----------------------------|--|
| 1. large pot with lid | from cupboard # <u>12</u> |
| 2. large liq. measuring cup | from cupboard # <u>3</u> |
| 3. dry measuring cups | from cupboard # <u>3</u> |
| 4. 3 small bowls | from cupboard # <u>above the counter</u> |
| 5. metal spatula | from drawer # <u>7</u> |
| 6. measuring spoons | from drawer # <u>7</u> |
| 7. vegetable peeler | from drawer # <u>7</u> |
| 8. large knife | from drawer # <u>7</u> |
| 9. wooden spoon | from drawer # <u>7</u> |
| 10. cutting board | hanging <u>up by the sink.</u> |

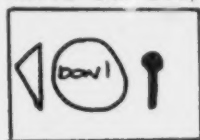
3. Collect all ingredients for vegetable soup on a utility plate from cupboard # 3

- | | |
|-------------------------|---------------------------------|
| <u>1</u> chicken cube | <u>1</u> small piece of parsley |
| <u>1ml</u> salt | <u>100ml</u> macaroni |
| <u>600ml</u> water | <u>1</u> tomato |
| <u>1</u> small carrot | <u>50ml</u> peas |
| <u>1/2</u> potato | <u>25ml</u> corn |
| <u>1/2</u> celery stalk | |

4. Make the soup:

1. Put the chicken cube, salt and water into pot.
2. Put the pot on a burner and turn the heat onto high.
3. When the water boils, turn the heat down to low.
4. Put the lid on the pot.
5. Peel carrots and potatoes with a vegetable peeler on garbage paper. Cut into small pieces with knife. Add to pot.
6. Wash the celery and parsley. Chop them into small pieces with large knife and add them to the pot.
7. Chop the tomato with knife and add it to the pot.
8. Add the macaroni to the pot.
9. Turn the heat up to high and bring the soup to a boil, then turn the heat down to low.
10. Simmer the soup for 15 min. or until the vegetables are soft.
11. Add peas and corn. Bring the soup to a boil.
12. Serve immediately using a wooden spoon.

***** While the soup is cooking set the table:



placemat
 soup bowl
 napkin (serviette)
 soup spoon
 salt & pepper shakers

***** While the soup is cooking, start cleaning up:

A is Special Duties B is Dishwasher C is Dishdryer D is Housekeeper

TEACHER ACTIVITY	STUDENT ACTIVITY
I. Introduction KEY?=What do you have to do before you start to cook?	Answer questions orally.
II. Content =What do you do next? 1. Instruct students to collect all utensils and check that each unit has the correct utensils for vegetable soup. 2. Instruct students to collect ingredients and assist them. 3. Instruct students to proceed with recipe by making soup, setting the table, eating, and cleaning up. Observe students and give oral feedback.	Collect utensils. Collect ingredients. Make soup. Set the table. Eat. Clean up.
III. Summary - Check each unit's clean up.	

EVALUATION

follow up

Handout: The Recipe for Success

Cooking teachers and experts suggest these tips.
Do you follow these tips to make sure you have followed a recipe exactly?

- Read the whole recipe through before starting.
Be sure you have all the ingredients, utensils and time needed to make the recipe.

Do some ingredients need to be at room temperature?

Do you need to preheat the oven?
- Measure out all the ingredients before starting.
Then group ingredients together as to how they are combined in the recipe.

In this way, you will not accidentally forget an ingredient.
- Follow the directions and don't try shortcuts.

The handout may be used in a variety of ways. The whole class or the kitchen units or pairs of students could go over the tips to survey which procedures cooks indeed do follow.

UNIT: E.S.L. INSTRUCTION VIA FOODS

Sample Lesson 10

TOPIC

Chocolate Chip Cookies Demonstration

OBJECTIVES

Thinking Process

identifying, labelling
measuring

identifying, labelling
sequencing directions

identifying
measuring
following directions
cause/effect reasoning

Knowledge and Skills

1. Given ingredients and utensils, the student will be able to list, in writing, the utensils and ingredients which are necessary to make chocolate chip cookies.
2. Given part of the directions to make chocolate chip cookies, the student will be able to complete the directions using a structured recipe sheet.
3. Given appropriate vocabulary, the student will be able to use this vocabulary to make chocolate chip cookies.

LANGUAGE SKILLS

Degree of Formality

informal/formal:

consulting → detached → casual

Discourse Tasks

talking amongst kitchen units, writing up completions of poster and structured recipe sheets, answering questions orally

Structures

imperative verbs of recipes

Vocabulary

terms for utensils: cookie sheet, spatula
ingredients: shortening, vanilla extract
directions: drop, blend, greased/ungreased
metric quantities
temperature

MATERIALS

ingredients

shortening, brown sugar, white sugar, egg, vanilla extract, flour, salt, baking soda, chocolate chips

utensils

metal spatula, rubber spatula, large bowl, dry measuring cups, measuring spoons, wooden spoon, teaspoons, cookie sheet, wax paper

Key Visuals

3 felt pens
structured recipe sheet
poster with 3 category labels:
Utensils/Ingredients/Directions

Key Visual

Structured Recipe Sheet worked through and filled in by students

CHOCOLATE CHIP COOKIES

1. wash hands, tie back hair, put on apron, roll up sleeves

2. Collect all utensils

metal spatula

bowl

rubber spatula

dry measuring cups

measuring spoons

wooden spoon

cookie sheet

teaspoons

3. Collect all ingredients

125 mL shortening

250 mL flour

100 mL brown sugar

2 mL salt

75 mL white sugar

125 mL chocolate chips

1 egg

2 mL baking soda

5 mL vanilla

4. Make the cookies. Here are the directions:

* PREHEAT OVEN TO 190° C

1. Cream shortening with a wooden spoon.

2. Add the brown sugar, white sugar, egg, and vanilla extract.

3. Beat together.

4. Add the flour, baking soda, and salt.

5. Blend well.

6. Stir in the chocolate chips.

7. Drop cookie dough down using a teaspoon onto an ungreased cookie sheet.

8. Bake for 8-10 minutes. Makes 30 cookies.

cream, bake, add, minutes, blend, add, wooden spoon, stir, beat, dough

TEACHER ACTIVITY	STUDENT ACTIVITY
I. Introduction - Announce today's lesson - chocolate chip cookies demonstration. II. Content - 1. Identification of Utensils, Ingredients, Directions a) Have one unit identify the utensils necessary for chocolate chip cookies. Place the necessary utensils on a unit's table. Then have the unit write the list of utensils on a poster size piece of paper. b) Have two units identify the ingredients and the amounts of ingredients necessary for chocolate chip cookies. Place the measured ingredients on the tables of two units. Then have the units write the ingredients on a poster size piece of paper. c) Have one unit complete the fill in the blank directions on the structured recipe sheet. Then have the unit write the answers to the blanks on a poster size piece of paper. 2. Hang up the posters written by the students concerning ingredients, utensils, and directions for chocolate chip cookies. Instruct students to use the posters to complete their structured recipe sheets.	Identify. Write list (utensils). Identify. Write list of ingredients and amounts. Do completion task. Hang up posters. Read + complete recipe sheet using posters.

<u>TEACHER ACTIVITY</u>	<u>STUDENT ACTIVITY</u>
3. Demonstrate chocolate chip cookies preparation. a) Emphasize new vocabulary and review old vocabulary. KEY?=How do you use a rubber spatula? Why don't you grease the cookie sheet? What is step 1? 2...? How shall I measure 75 mL of white sugar? Which measuring spoons do I use? What does creaming do? Why do you preheat an oven?	Observe. Answer questions orally.
III. Summary - Announce that next class the students will make cookies in pairs.	Listen.

EVALUATION

Give oral feedback and guidance to students when answering questions.
Check completed recipe sheets.

Note oral feedback when observing students' lab performance next class.

UNIT: E.S.L. INSTRUCTION VIA FOOD

Sample Lesson 11

TOPIC

Chocolate Chip Cookie Lab

OBJECTIVES

Thinking Process

identifying, measuring
following instructions

solving problems
evaluating

Knowledge and Skills

Given a cooking demonstration last class,
the student will be able to make chocolate
chip cookies using a structured recipe
sheet s/he has written.

Attitudes and Values

Given a clean up duty, the student will be
able to clean up his/her unit so that the
unit is left in the same tidy condition it
was found.

LANGUAGE SKILLS as per lesson 10 with only some changes in Discourse Tasks:

DISCOURSE TASKS

reading a recipe, talking to cooperate

MATERIALS

utensils
ingredients for chocolate chip cookies

Key Visual

structured recipe sheet

<u>TEACHER ACTIVITY</u>	<u>STUDENT ACTIVITY</u>
I. Introduction - Point out blackboard where assignment of clean up duties are written.	Observe. Read.
II. Content - Instruct students to make cookies. Observe and give oral feedback.	Wash hands, put on apron. Make cookies. Ask questions for clarification (if necessary). Clean up.
III. End - Check each unit's clean up.	

EVALUATION

Teacher observes and notes oral feedback. Students evaluate cookies according to criteria: taste, appearance, crispness/chewiness, etc..

UNIT: E.S.L. INSTRUCTION VIA FOOD

Sample Lesson 12

TOPIC

Dad's Cookies Lab

OBJECTIVES

Thinking Process

locating, identifying,
following instructions,
measuring

solving problems
evaluating

identifying

Knowledge and Skills

1. Given a Dad's Cookies recipe, the student will be able to make Dad's Cookies using the previous experience of making chocolate chip cookies.
2. Given a clean up duty, the student will be able to clean up his/her unit so the unit is left in the same tidy condition it was found.
3. Given words for ingredients, the student will be able to identify this vocabulary which will allow him/her to make Dad's Cookies.

LANGUAGE SKILLS

Degree of Formality

formal/informal:

consulting → detached →
casual

Discourse Tasks

reviewing procedures, reading recipe,
answering questions orally, talking during
baking, evaluating products orally

Structures

imperative verbs for recipes

Vocabulary

coconut, rolled oats, grains, light brown
sugar, light brown in colour
greased
cream, heat, blend, stir in, form, place,
flatten, dip

MATERIALS

utensils

ingredients for Dad's Cookies

Key Visual

Dad's Cookies recipes dittoed

Key Visual

DAD'S COOKIES

UTENSILS: measuring spoons
dry measuring cups
wooden spoon
metal spatula
rubber spatula
large bowl
small bowls
cookie sheet
fork
large spoon

INGREDIENTS: 125 mL shortening
250 mL light brown sugar
1 egg
2 mL vanilla extract
250 mL flour
2 mL baking powder
1 mL baking soda
250 mL rolled oats
125 mL coconut
1 mL salt

DIRECTIONS:

1. Preheat oven to 180°C.
2. Cream shortening with a wooden spoon. (Use rubber spatula to scrape shortening out of measuring cup.)
3. Add brown sugar, egg and vanilla extract.
4. Beat together.
5. Add flour, baking soda, baking powder, and salt.
6. Blend well.
7. Stir in the oats and coconut.
8. Form dough into small balls using your hands.
9. Place balls on a greased cookie sheet.
10. Flatten balls with a fork. (Dip fork in flour to prevent it from sticking to the dough)
11. Bake for about 15 minutes or until light brown in colour.

<u>TEACHER ACTIVITY</u>	<u>STUDENT ACTIVITY</u>
I. Introduction - discuss chocolate chip cookies made last class. KEY?=Did you like your cookies? Why? What does blend mean? Where are the cookie sheets kept? 1. Announce that today the students will make another type of cookie and the instructor will not demonstrate. 2. Hand out recipes and instruct students to read it to themselves. 3. Discuss new vocabulary. KEY?=Look at the ingredients of these cookies. Are there any ones you have never used before? =Is coconut an ingredient you have used before? =Rolled oats are a grain. Name some other grains. =What do you think light brown sugar is? 4. Instruct students to make cookies. Announce assignment of clean up duties. III. End - Check each unit's clean up.	Answer questions orally. Listen. Read recipe silently. Answer questions orally. Wash hands, put on apron. Collect utensils. Collect ingredients. Make cookies. Clean up.

EVALUATION

Teacher observes and notes oral feedback when students make cookies.
 Teacher gives oral feedback and guidance when students answer
 questions.
 Students evaluate adequacy of clean up of units.

UNIT: E.S.L. INSTRUCTION VIA WORKSTUDY AND LAW

Four Activities

TOPIC

Starting a New Job

GOALS FOR UNIT

Students will use social language appropriate for new job settings.

Students will understand procedures that must be followed when starting a new job.

Students will understand regulations affecting employees.

Students will solve problems appropriately when they arise in new job situations.

By its very nature, this unit has practical goals. It concentrates first on social linguistic interactions - introductions and discourse strategies for clarifying names and information. The second part of the unit is much more difficult. Students learn about job procedures, employment regulations and problems in the work place. They are challenged to express opinions, make decisions and to solve job-related problems.

Some adjustments may have to be made to accommodate student backgrounds and experiences. However, teachers are urged to impress on students the practicality and importance of this kind of knowledge and skill as a preparation for any kind of employment.

The field testers of this unit have deemed it suitable for:

- Mature, advanced E.S.L. students, approximately 3/4 way through the school year program,
- Mature Transitional English classes,
- Level 2 of Pre-employment classes, but with reservations, and
- E.S.L. Guidance classes.

ACTIVITY 1

OBJECTIVES

Thinking Process
Identifying

evaluating

LANGUAGE SKILLS

Degree of Formality

Discourse Tasks

Structures

Vocabulary

INTRODUCTIONS

Knowledge and Skills

Students will learn how to make and respond to formal and informal introductions appropriately.

Students will develop positive attitudes towards social and linguistic conventions in the workplace.

formal/informal:
consulting → casual

introducing oneself to an employer

introducing oneself to a fellow employee
clarifying a response

Let me introduce you to _____.
This is _____.
I'm _____.

What's your name again?
I didn't catch your name, etc.

good morning, hi, hello, may I help you?
introduce, help you out

MATERIALS		script for tape:
Characters		
	Mr. Ming Chow (new employee)	=M
	Mrs. Martin (Supervisor)	=S
	Zya (employee)	=Z
Locations		
	In the Office	
	In the Workplace	

In the Office	
M	Good morning.
S	Good morning. May I help you?
M	Yes, my name is Chow. I am reporting for work. This is my first day.
S	Oh, yes Mr. Chow. I've been expecting you. My name is Mrs. Martin. I am your supervisor.
M	I am pleased to meet you Mrs. Martin.
S	Are you ready to begin work now?
M	Yes, I am.
S	Good! Let me introduce you to Zya. He'll be working with you and can help you out if there is a problem. What's your first name Mr. Chow?
M	It's Ming.

In the Workplace	
S	Zya, this is Ming. He will be working with you this morning.
Z	Hi Ming.
M	Hello...I'm sorry, I didn't catch your name.
Z	Zya. Z-y-a.
M	Oh, hi Zya.
S	Good luck Ming. Zya will explain the work to you.
M	Thank you Mrs. Martin. Goodbye.

Procedure

Play tape of Introductions and ask comprehension questions. Have students compare Ming's self introduction to Mrs. Martin, the supervisor, and Mrs. Martin's introduction of Ming to Zya.

Discuss alternative ways of requesting and responding to clarification of names.

Evaluation

Students in pairs are given different situations in which to role play introductions. Whole group decides on the appropriateness of language in situations.

ACTIVITY II

First Day Procedures

OBJECTIVES

Thinking Process

identifying, describing
procedures

comparing/contrasting

sequencing

predicting procedures
predicting

describing
hypothesizing

Knowledge and Skills

Students will interview to
elicit specific information
about procedures during the
first day on the job.

Students will compare first
day procedures in small/large
companies.

Students will be able to
anticipate procedures when
starting a new job.

Students will role play
different situations on the
first day of a job based on
information gained from
interviews and/or
experiences.

Students will write a
description of a hypo-
thetical first day on the
job.

LANGUAGE SKILLS

Degree of Formality

informal/formal:

casual → consulting

Discourse Tasks

interviewing and filling in an
interview sheet

charting comparisons of
companies

reporting orally to a group
role playing

describing procedures in
writing

Structures

question words and question
formations

past tense

passive voice: Introduce the
passive voice structure and
have students work with it
throughout the exercise.

Were you introduced to anyone?

I was introduced to _____.

What were you shown?

I was shown _____.

Were you given anything?

I was given _____.

Structures (continued)

future tense in active/passive voice:

I'm sure that _____ will _____.
I think that _____ will _____.
I expect that _____ will _____.
I will be introduced to _____. I will
be shown _____.

should/would
if conditionals e.g.:
If she did that, she would _____.

MATERIALS

Key Visuals

Resources

Interview Sheet

Chart: The First Day on the Job

-Place:

Guided Steps to Employment Readiness

Part D Doing Well on
the Job, 1984.

-Moving on! By Staying On.

Both of the above are published by
Employment & Immigration Canada and
are available free of charge.

-English as a Second Language for

Adults: English for Work

Available from

B.C. Ministry of Education

Publications Services

878 Viewfield Road

Victoria, B.C. V9A 4V1

-guest interviewees from the workplace

Key Visual

INTERVIEW SHEET

Ask the following questions to find out what happens the first day of a job.

Name of Company: _____

Is it a large or a small company? _____

Kind of job: _____

Who did you report to on the first day? _____

Were you introduced to anyone? If so, who? _____

Were you shown anything? If so, what? _____

Were you given anything to read? If so, what? _____

Did you have to fill out any forms? _____

How did you find out about your duties? _____

Did you have any problems on the first day of the job? _____

If so, what were they? _____

Key Visual Chart

THE FIRST DAY ON THE JOB		
Key Procedures	at Large Companies	at Small Companies
job title		
report to		
introduced to		
shown		
read		
forms		
duties assigned by		
problems		

PROCEDURES

1. If one student in the class has or has had a job in Canada, the class as a group interviews him/her using the interview sheet.

Alternatives

- If a number of students are working, divide the class into groups with an interviewee in each group.
 - If none of the students has had a job, the teacher could act as the interviewee.
2. Invite guests to the class to be interviewed. Be sure the guests represent different kinds of businesses where students might find at least part-time employment e.g. McDonald's, Joe's Pizza, a corner grocery, a department store, a hospital.
 3. Students draw up a chart for comparing procedures in large and small companies. Discuss the chart.
 4. Students in groups are given hypothetical situations. Their task is to role play the first day procedures.
 5. Students each write a description entitled "My First Day at Work".

EVALUATION

Anecdotal comments by teacher on written reports indicate to students how realistic their predictions and expectations are.

ACTIVITY III

Understanding Regulations

OBJECTIVES

Thinking Process

identifying
defining

contrasting
comparing
cause and effect
reasoning
forming principles

analyzing
procedures and policies

making decisions

predicting
recommending

Knowledge and Skills

Students will become aware of different kinds of regulations which exist in the workplace.

Students will develop an understanding of the need for regulations by listing the rights and responsibilities of employees and employers.

Students will read and comprehend regulations typically found in an employee's handbook.

Given a specific occupation, students will fill in a chart indicating how regulations are implemented.

Students will devise a workable employees' handbook.

LANGUAGE SKILLS

Degree of Formality

informal/formal:

casual → consulting
detached

Discourse Tasks

reading handbooks of regulations or extracts
oral discussion involving defining
listing (in writing)
contrasting and comparing
synthesizing information orally and in writing
devising an employee's handbook

Structures

legal structures: definitions;
qualifying appositives and relative clauses which state rules applicable under certain conditions

modals: may/might
shall/should
can/could
must

if...then...; when...then...

LANGUAGE SKILLS (Continued)

Vocabulary

job, occupation, employee, employer,
handbook
rules, regulations, procedures, safety,
precautions,
benefits, bonuses, plans - medical,
dental, insurance
pay cheques, pay period, deductions
"reporting off sick"
"leaves"
probation
probationary period
legal, quasi-legal terms:
grievance, contracts, arbitration

MATERIALS

Employees' handbooks or facsimiles
Employment Standards Information Bulletins published monthly are
available from the B.C. Ministry of Labour, Employment Standards
Branch. Offices of that branch are located throughout the province of
British Columbia.

Key Visual

The format for this chart will depend upon the handbooks available.

<u>REGULATIONS</u>	
Employer:	_____
Job:	_____
How is your work checked?	_____
The Probationary Period is	_____ months.
Note regulations about these:	
Being absent:	
Leaves: sick leave, leave of absence, leave because of family death or illness, ... _____	
How do you report that you are sick? _____	
Do you need a medical certificate from your doctor? _____	
Safety:	
construction hats needed	
no smoking	
steel-capped boots required	
... _____	
Benefits:	
medical, dental, holiday, bonuses, pension, unemployment insurance...	

PROCEDURE

- Copies of Employees' Handbooks from different companies would be ideal material to use because of their authenticity. These are very difficult to obtain, however.
- As an alternative, the teacher could prepare handouts of typical regulations from authentic sources. It is important to use language of a legal or quasi-legal nature so that the students are exposed to realistic wording. A great deal of paraphrasing, oral and written, will be necessary so that meaning becomes clear. Lists and comparison charts will be a useful tool. Finally, students will complete the charts having decided, after consultation with the teacher, on a specific type of work for which they have some aptitude.
- The Employment Standards Information Bulletins are very useful. The layout for each bulletin is very readable and the language is relatively simple. Each bulletin is devoted to a single topic, such as 'payment of wages', 'annual vacation', and 'child employment'.

EVALUATION

As a group project, students could set up their own company, some taking the roles of employers, some employees. An employees' handbook could be a written assignment with separate groups working on different sections, e.g. job descriptions, payroll procedures, benefits, leaves, safety, giving notice, etc. The Employment Standards Information Bulletins could provide models for each section, also.

ACTIVITY IV
Problem Solving

OBJECTIVES

Thinking Process
detecting problems

expressing opinions
solving problems
proposing alternatives

making decisions
forming policy

Knowledge and Skills

Students will brainstorm and list some of the problems which could arise on the job. They will reread interview sheets to detect problems.

Students in groups will discuss the problems and solutions in the handout.

Groups will reach a consensus in their solutions.

LANGUAGE SKILLS

Degree of Formality

informal: casual

Discourse Tasks

recalling problems
listing problems
discussing problems
reaching a consensus

Vocabulary)
Structures)

Review of Activity II
linguistic items.

He should ____.

She should ____.

You should ____.

The best thing to do would be to ____.

I think s/he should ____, because
s/he ____.

MATERIALS

Book Moving on! By Staying On
Stories #14, #15

Handout taken from this book:

PROBLEM SOLVING

1. You are introduced to someone and he is not sure of the pronunciation of your name. When he asks you to repeat it, what should you do?
 - a) Think up an English name that will be easier for him to say.
 - b) Tell him he can say it any way he likes. It doesn't matter to you.
 - c) Spell it for him.
2. Ming started a new job this morning but no one told him what time he could take a break. What should he do?
 - a) Keep working until someone tells him to take a break.
 - b) Work until he sees someone else go for a break and then go too.
 - c) Finish everything he was told to do and then take a break.
 - d) Ask one of his co-workers about the usual procedure for taking breaks.
3. Helen's boss is explaining the way they do things in her new job. In her last job, Helen did almost the same kind of work but the system in that company was different and Helen thinks it was better. What should she do?
 - a) Tell the new boss right away about the other system.
 - b) Forget about the other system and do the job the way this boss wants.
 - c) Try the system in the new company for a while and then suggest changes to the boss.
 - d) Say nothing to the new boss but use the other, better system when she is doing her work.

PROCEDURE

- Have students identify problems which could arise on the job and list them on the board.
- Use Interview Sheets from Activity II to stimulate and recall.
- Discuss solutions to some of the problems listed. Encourage the students to choose appropriate solutions and to support their decisions.
- Encourage a class consensus on some solutions so that students understand consensus.
- Put class into small groups to discuss the problems on the handout sheet and to choose solutions. Each group must reach a consensus.

EVALUATION

- Have a whole class discussion to compare results.
- Have the class create other problem situations and solutions based on their experiences in this unit or outside school.

UNIT: E.S.L. INSTRUCTION VIA SCIENCE AND LANGUAGE

SAMPLE LESSONS FROM SCIENCE, CLASSES 2 and 5

TOPIC

Embryology: Chick Hatching

GOALS FOR UNIT

The second language students will take part in the scientific process as they work in a science environment which allows them to experiment and hypothesize and to discover information about embryology and the hatching of chicken eggs.

The students will thereby have opportunities to communicate about something real and will be motivated to communicate in English.

The students will build an experiential and conceptual base which will help them interpret the specialized language of science.

The students will engage in language activities which will further help them understand the language of science. The activities will be creative as well as skills-based.

The students will improve in solving problems and will become more independent thinkers.

ACKNOWLEDGEMENT

These Lessons were devised by Bev Knutson-Shaw in preparation for teaching Science and English to Grade 7-8 girls in Nigeria on a CUSO program.

UNIT: E.S.L. INSTRUCTION VIA SCIENCE AND LANGUAGE

Sample Lessons From An Embryology Project

TOPICS

Second Science Class

Putting the Eggs in the Incubator/Day 1 Embryos

OBJECTIVES

Thinking Process

observing, labelling

classifying

describing

observing

predicting

labelling

identifying

cause/effect reasoning

following instructions

noting a process

Knowledge and Skills

The students will review how to prepare an incubator for the eggs.

The students will record scientific information using a chart.

The students will observe the fertilized egg and predict what will happen to it.

The students will hear and use vocabulary relating to embryology.

The students will be able to record scientific information using the passive.

Attitudes and Values

The students will appreciate that the scientific method demands a very careful following of procedures.

PREREQUISITES

covered in previous
(day's) lessons

The students have already learned how to to make and use a chart.

The students have already discussed the uses of the incubator and the procedure for preparation.

The students have already turned the incubator on.

LANGUAGE SKILLS

Degree of Formality

formal: consulting → detached

Discourse Tasks

discussion of requirements

listening to and orally

describing and reading procedures

writing up procedures in journal

labelling diagrams in journal

orally predicting changes in the embryo

writing up passive voice worksheet

Structures

passive voice

causal: Heat causes the eggs to hatch.

Vocabulary

egg, embryo, shell, yolk, albumen,
blastodisc

moisture, incubator

fertilized, maintained, hatched, porous
approximately

-141-

LANGUAGE SKILLS (Continued)

Symbols

degrees of temperature, e.g.

38⁰ Celsius

X on egg=narrow end

Y on egg=air pocket end

MATERIALS

incubator previously heated to 38⁰

3 dozen fertilized chicken eggs

1 grease pencil

1 dish

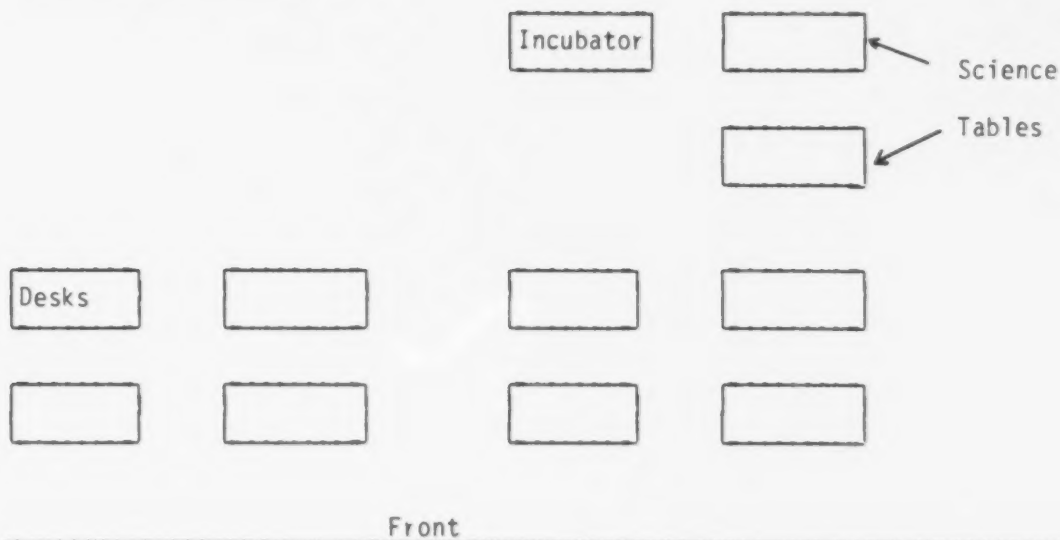
1 water dish

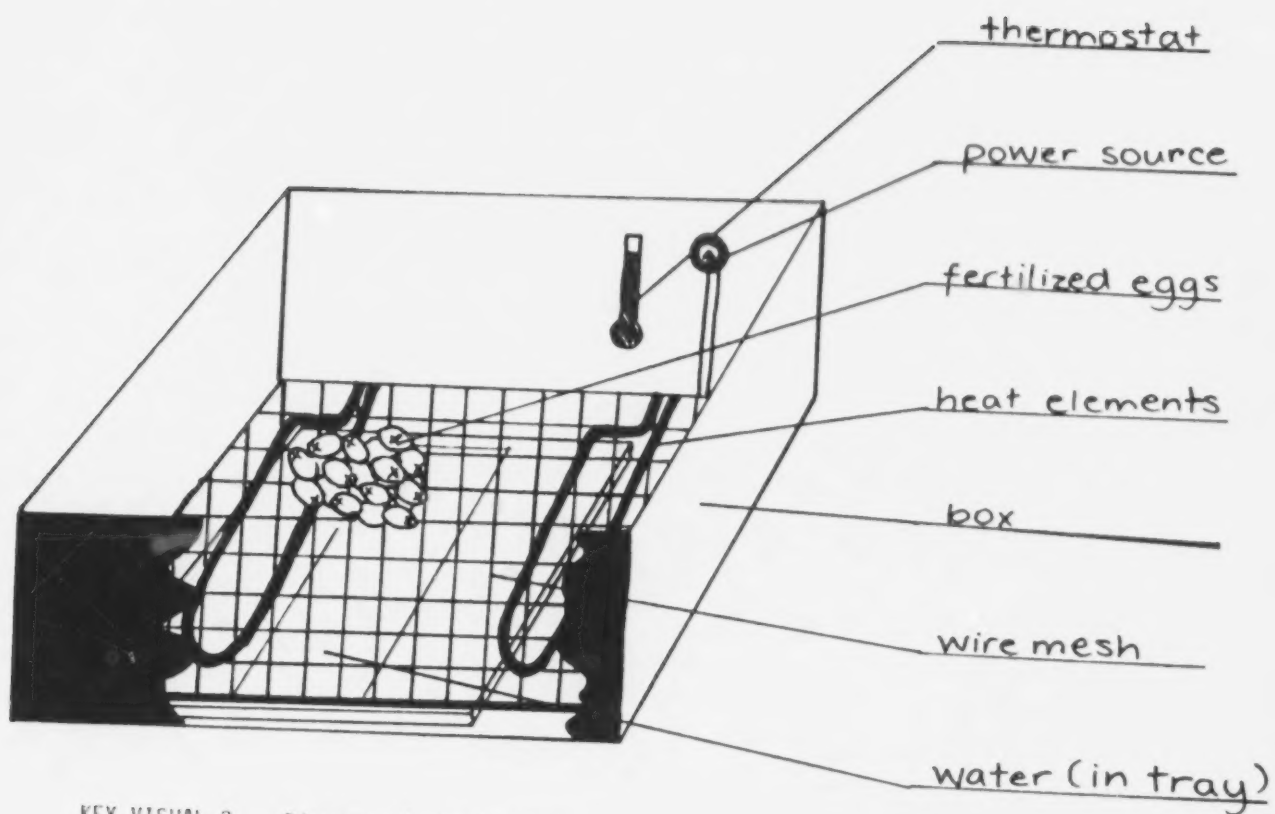
picture of chick

Key Visuals

- #1 chart for marking egg turns and temperature (not provided here)
- #2 diagram of the incubator
- #3 diagram of chicken embryo, Day 1
- #4 assignment on passive voice
(See the summary in the Evaluation section.)

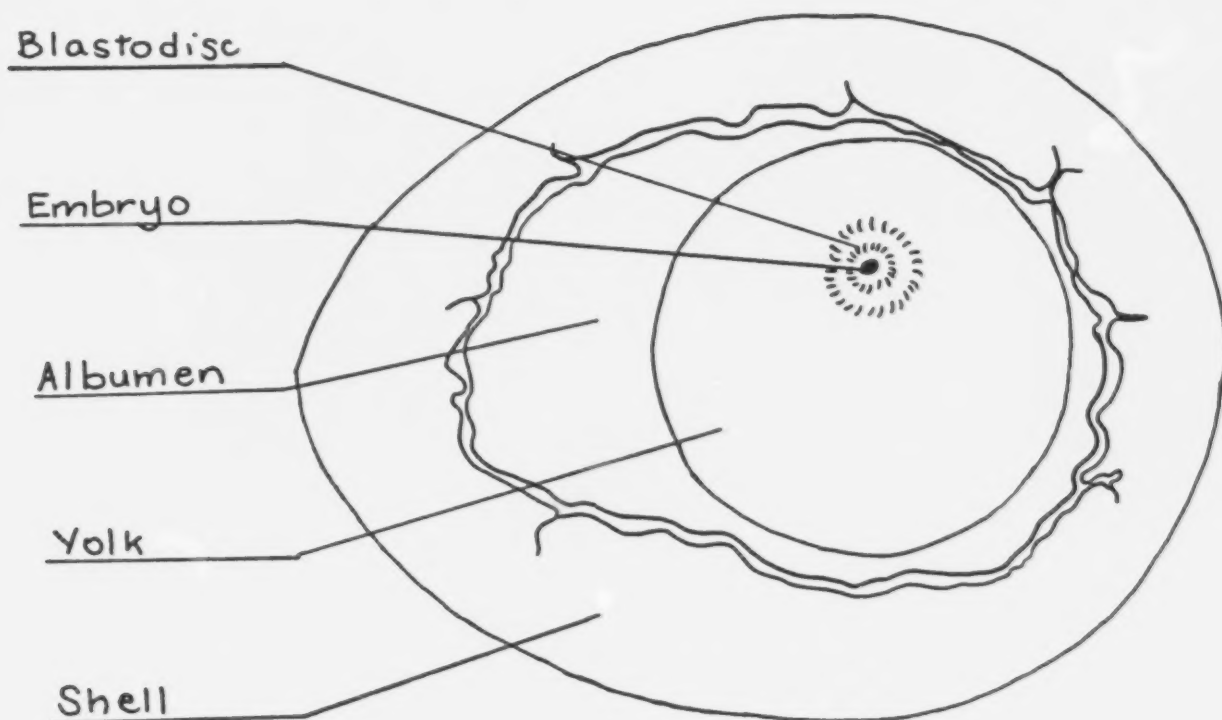
CLASSROOM ORGANIZATION





KEY VISUAL 2 Diagram of the Incubator

Day 1



KEY VISUAL 3 Diagram of a Chicken Embryo, Day 1

ACTIVITIES

discussion:
identifying what eggs
require in order to hatch

We know that we can get a chicken from an egg, but what needs to be done to the egg to get the chicken? (The students will probably suggest we need a hen to sit on the eggs.)
Discuss what the hen does to the egg.
Discussion should lead to the fact that the mother hen provides - heat, moisture, and egg turning.

demonstration:
putting the eggs in the
incubator

Explain to the students that because we do not have the mother hen, we must provide the three things for the eggs to hatch. Review the set up of the incubator.
Explain to the students -
1. I have heated the incubator to approximately 38°C. I record this temperature on the chart (Key Visual 1 from previous lesson). This temperature must be maintained or the chicks will not develop.
2. I clean off the fertilized egg and mark an X at the narrow end and a Y at the fat end.
3. I place the egg in the incubator X up.
4. I put some water in the bottom of the incubator.

review:
going over the procedures

Now ask the students to tell you what you have done and record it on the blackboard.
The students should say something like You heated the incubator to _____, etc.
Go through the whole procedure.
Now introduce passive voice.

understanding the passive
voice transformation in a
concrete, scientific context

Explain that in scientific writing passive voice is often used to stress what is being done - not who is doing it.
You turned on the incubator would become The incubator was turned on.
(The passive of an active verb is formed by inserting the auxiliary verb to be with the same tense as the active verb and adding a past participle ending to the active verb.
The grammatical explanation does not need to be given to the students. The sentence examples will be most helpful for them.)

ACTIVITIES (Continued)

putting the eggs in the incubator
recording the procedure

Go over the procedure that is written on the board and with the students change each sentence into passive voice. Have the students come and prepare the eggs and then record in passive voice the exact procedure in their journals. Have them describe the incubator as well, with a labelled diagram as in Key Visual 2.

development:
describing a chicken
embryo

Show a picture of a chick.
Crack open an egg.
Explain that they are looking at a chicken embryo and that it is going to develop into a chicken.
Have the students describe what they see. (See Key Visual 3.)
Point out the parts and discuss their function e.g.
 shell - protective cover - porous - allows air and water in
 yolk - supplies nutrients
 blastodisc - terminal disk of an ovum from which the embryo and its external functional structure develops
 embryo - unborn animal - i.e. chicken before hatching
Students are to draw the embryo in their journals and label the parts. (Key Visual 3.)

EVALUATION

Discuss why it is important to keep track of the procedure. Establish that experimental procedures are important in using the scientific method.

Students can check over each other's diagrams of the incubator and the chicken embryo (Day 1) noting whether all parts are included and labelled. This checking will be another review.

Teacher checks over write-ups of the procedures in the journals and grades them according to these criteria: proper sequence, complete sequence, grammatical use of passive voice.

SUMMARY

follow-up

This exercise is a Key Visual because the sequence of sentences recapitulates the steps followed in setting up the incubator and describing the chicken embryo.

Assignment on passive voice:

Do one short oral procedure. I move the chair to the window. Have them tell you in passive voice what you have done. The chair is moved. The chair is moved to the window. The chair is moved to the window by you. (Key Visual 4.)

Change the following to emphasize the action not the agent:

1. We raise chickens for their eggs.*
2. She put the incubator on the counter.
3. She put some water in the bottom of the incubator.
4. We keep the fertilized eggs at 38⁰.*
5. We cracked an egg into the bowl.
6. I separated the egg from the shell.
7. I drew a picture of the embryo.
8. I labelled the albumen, yolk, and shell.
9. The albumen supplies moisture for the embryo.*

*These three sentences have a special habitual use of the present tense. The other sentences use past tense. If mixing tenses confuses students, omit sentences 1, 4 and 9.

UNIT: E.S.L. INSTRUCTION VIA SCIENCE AND LANGUAGE

Sample Lessons From An Embryology Project Fifth Science Class

TOPIC

Looking at the Embryo

OBJECTIVES

Thinking Process

observing, describing

identifying, labelling

identifying

cause/effect reasoning

comparing

forming analogies

Knowledge and Skills

The students will note the growth and changes of the embryo.

The students will be exposed to new vocabulary relating to changes in the embryo.

The students will be able to identify the heart, the eye, the collector veins, the amnion, and the yolk stalk. (See Key Visual 6.)

The students will combine sentences adding -ing to the verb.

The students will value the use of analogies to understand phenomenon; e.g., the amnion protects the embryo like water protects a grape in a jar of water.

PREREQUISITES

(covered in the previous lessons)

In the previous lesson the students discussed what growth had taken place to that point and had learned the terms membrane, yolk sac, amnion.

The students have done sentence combining before.

LANGUAGE SKILLS

Degree of Formality

formal: consulting → detached

Discourse Tasks

orally describing, charting comparisons, reading charts and diagrams, talking during the counting of heartbeats, orally answering questions, recording embryo development in science journals along with a labelled embryo diagram
forming analogies

Structures
(sentence-combining)

participles: -ing forms expressing causal relationships

Hens sit on their eggs. They keep their eggs warm.

→ Hens sit on their eggs, keeping them warm.

Vocabulary

blood vessels, collector veins, pulsing heart, lens (eye), spinal cord, waste, vital organs, yolk stalk, amnion, allantois, cells

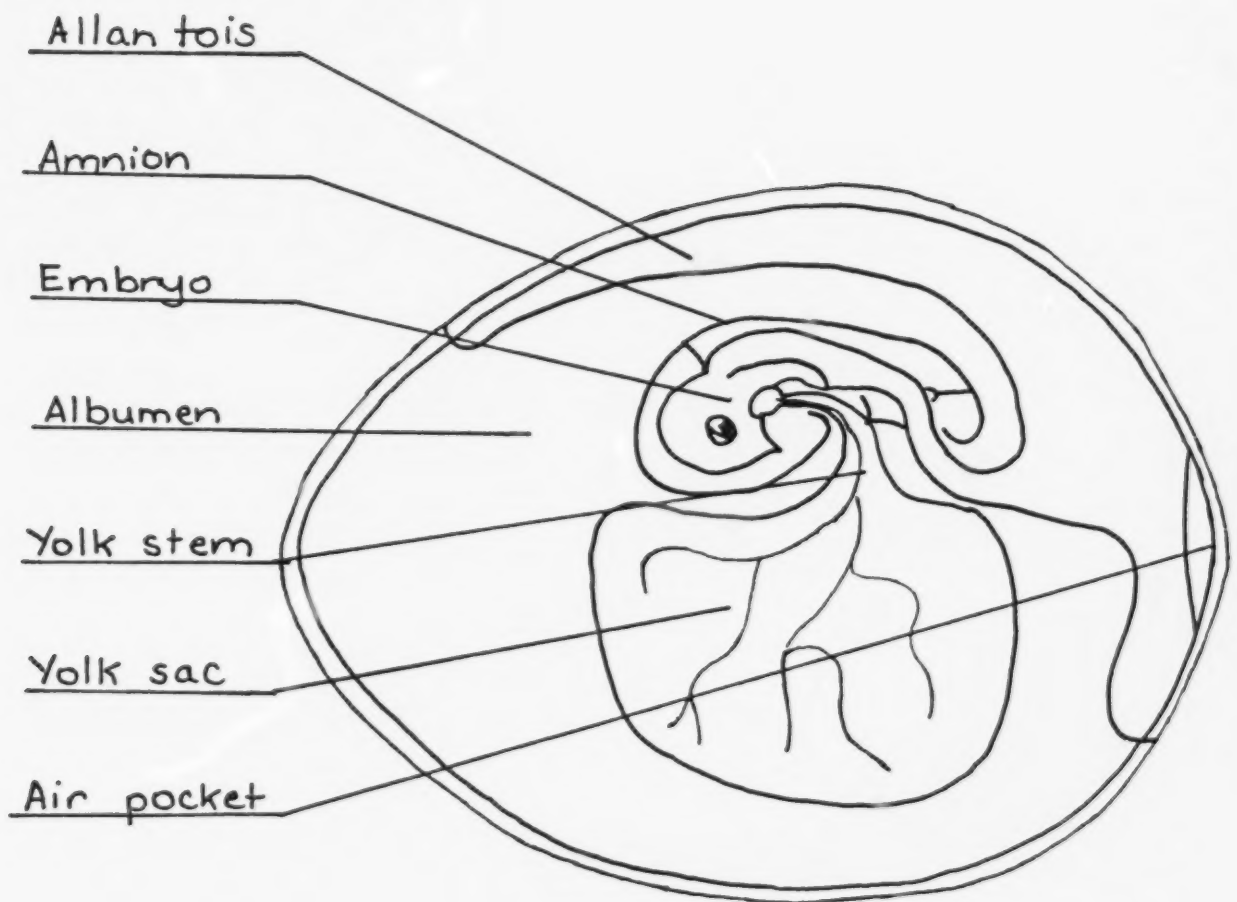
MATERIALS

2 eggs
2 dishes
2 hand lenses
1 picture of an embryo
2 grapes and a jar of water

Key Visuals

#5 chart comparing Day 1 and Day 5 embryos
#6 diagram of chicken embryo Day 5
#7 sentence-combining exercises

Day 5



KEY VISUAL 6 Diagram of a Chicken Embryo, Day 5

CLASSROOM ORGANIZATION

Same as in previous lesson. Students will work on back science tables.

ACTIVITIES

development:
observing and describing
changes in the chicken
embryos

Crack open an egg in the dish and ask the students to describe what they see. Record answers on the board. Ask them to compare the embryo to the one they saw on Day 1.

Key Visual 5

Put chart on the board

Day 1	Day 5

Students should see the following. (They do not need to give the technical terms.)

- embryo completely surrounded by amnion
- embryo almost completely separated from yolk sac
- the beginning development of legs and wings
- eye lens
- the beginning of allantois formation
- heart and blood vessels
- the pumping of the heart

observing and counting
heart rate

Divide students into 2 groups and have them count and record how fast the heart is pumping.

Discuss why it is necessary to record this information.

noting functions

Ask - What is the heart doing? (It is pumping blood.)

What is the blood for? (The blood brings food to the embryo cells and takes away the waste.)

Using the diagram (Key Visual 6) and the embryos explain how the blood goes out to the yolk (food), collects the nutrients and brings it back to the collector vein, which surrounds the embryo and which supplies the food to the growing embryo.

Note the formation of the eye.

Note the embryo is completely surrounded by the amnion and joined to the yolk sac by the yolk stalk. This is how food gets to the embryo.

ACTIVITIES (Continued)

demonstration: Ask - What purpose does the amnion serve?
grape and jar experiment Put a grape in an empty jar, shake it hard,
and have the students note what happens to
the grape.
Put a grape in a jar of water, shake it hard,
and have the students note what happens to
it.
Now repeat the question - What purpose does
the amnion serve?
The students should see that the amnion
protects the chicken embryo.

review Go over the development of the embryo in
passive voice.
Have students record development in journals
and include a diagram of the Day 5 embryo
as in Key Visual 6.

review: Sentence-Combining
going over the process Explain that scientific writing presents
information in compact ways. It combines
ideas by combining sentences. Scientific
writing often uses an -ing sentence-
combining pattern.

combining sentences Put these two sentences on the board.

The shell of the egg is porous.
The shell allows air and water in.

Show the students how to combine the
sentences into:

The shell of the egg is porous, allowing
air and water in.

Discuss the changes in the new sentence.
Grammatical terminology is not necessary.

(Some sentences can be combined by dropping a
recurring pronoun or noun in the second
sentence and adding -ing to the verb, thus
indicating a cause and effect relationship
in the sentence.)

ACTIVITIES (Continued)

(This is a Key Visual because the numbered steps correspond to the process.)

Put the following sentences on the board.
Key Visual 7

1. Hens sit on their eggs. They keep the eggs warm.
2. The incubator is 38°C. It keeps the eggs warm as they develop.
3. There is water in the incubator. It keeps the albumen from drying out.
4. The shell surrounds the embryo. It protects the embryo from any harm.
5. The amnion surrounds the embryo. It protects the embryo from banging against the shell.
6. The collector vein surrounds the embryo. It supplies food to the growing embryo.
7. The heart is like a pump. It pushes blood out to the yolk sac.
8. The blood picks up the nutrients in the yolk. It brings the nutrients back to be used by the growing embryo.

Do the first two sentences with the students. Have them try them in their books, then do them orally.
Assign the remaining six.

SUMMARY

Have the students write two sentences using this sentence combining method about the development of the chicks.
Students record these in their journals.

EVALUATION

Students discuss whether they are getting better at observing embryos, noting details and seeing relationships.
Students comment on how accurate their counts of heartbeats were.
Teacher grades science journals, especially noting number of descriptive details, improvement in use of passive voice, and ability to combine two new sentences.

UNIT: E.S.L. INSTRUCTION VIA LANGUAGE ARTS AND ART

TOPIC

Cartoon Strips

OBJECTIVES

Thinking Process

identifying

describing

narrating

sequencing

decision-making

evaluating

recommending

Knowledge and Skills

Students will use a cartoon strip format to pick out and describe main events of a story.

Students will illustrate the main events of a story.

Students will be able to discriminate between main events and supporting details.

Students will comment on each other's cartoon strips noting areas for improvement regarding sequencing and choice of main events.

LANGUAGE SKILLS

Degree of Formality

informal: casual → consulting

Discourse Tasks

describing and narrating in all modes: reading, listening to, writing and telling; discussing choices

Structures

time expressions: first, then, next, after
past tense

Vocabulary

pertains to story chosen

MATERIALS

a good story

writing paper

drawing paper

art supplies

optional: paper strips for sequence of story bits

Key Visuals

sample cartoon strips

ACTIVITIES (Continued)

- Give the student an opportunity to read several cartoon strips. Ask the students to relate to the class the story of one cartoon strip of their choice.
- The teacher reads a story to the class.
- The teacher then elicits from the class a list of a large number of events which occurred in the story and writes the list on the black-board. Both main events and supporting details should be included.
- Each student selects the events which s/he considers to be the main events. In small groups the students give their rationales for their choices.
- Each student makes a number of squares on a strip of paper corresponding to the number of main events s/he has chosen. In each square the student prints a sentence describing the event, and draws a detailed picture depicting the happening.
The story must be clear and coherent.

EVALUATION

The students in small groups share their work and discuss it making recommendations for improvement to each other. They could use these questions to guide them:

- Does the cartoon show and tell the story?
- Are the pictures in the right order?
- Are the main events pictured?

The finished products are displayed.

UNIT: E.S.L. INSTRUCTION VIA LANGUAGE ARTS AND ART

TOPIC

Dialogue

OBJECTIVES

Thinking Process
identifying

choosing
hypothesizing
inferring personal
opinions
sequencing
interpreting

Knowledge and Skills

Students will identify famous people from memory, from pictures, from class discussion.

Pairs of students will write a dialogue between two famous people.

Students will illustrate the dialogue with portraits, caricatures, or cartoons.

LANGUAGE SKILLS

Degree of Formality

The whole range from intimate to detached - the degree of formality will vary according to the famous people chosen.

This dialogue assignment revolves around playing with linguistic style.

The students will work with the accent and the way of speaking that they perceive each famous person to have.

Discourse Tasks

writing dialogue
editing, in pairs
role-playing using the dialogue as script

Structures)
Vocabulary)

determined by students' chosen topics

MATERIALS

photographs of people from magazines/news-
papers to help brainstorm names of famous
people
two boxes
writing paper, drawing paper, display space

ACTIVITIES

- Brainstorm ideas for characters and topics of conversation using photographs as stimulus.

- One student acts as scribe and writes suggested names on a list; another student writes list of suggested topics.

- The names are placed in one box; the topics, in another.

The students work in pairs and choose unseen two names and one conversational topic from the boxes, e.g. Abraham Lincoln and Queen Elizabeth II talking about travelling or Wayne Gretzky and John McEnroe talking about schools.

- Students develop a dialogue between the two chosen people on the chosen topic imagining what their opinions would be.

- Teach the use of quotation marks around actual words spoken.

- Brainstorm words used to replace said e.g. answered, declared, stated, yelled, whispered, roared, argued, contradicted...

- Edit and proofread rough copies.

- Illustrate the dialogue with a portrait, caricature or cartoon.

- Display the dialogue and illustration.

EVALUATION

Each pair of students reads aloud or enacts the dialogue they have created. At the conclusion of the performances students comment on what they liked about the dialogues.

UNIT: E.S.L. INSTRUCTION VIA LANGUAGE ARTS AND ART

TOPIC

Newspaper Reporter and Illustrator

OBJECTIVES

Thinking Process

identifying
sequencing
sequencing

sequencing
reporting
forming personal
opinions
interpreting
evaluating

distinguishing
evaluating

Knowledge and Skills

Students will compose interview questions.

Students will practise interviewing techniques.
Students will write up the interview as a reporter.

Students will illustrate the feature story with artwork suitable for a newspaper publication.
Students will judge each other's reports as to their accuracy.

LANGUAGE SKILLS

Degree of Formality

As the discourse activities involve switching from talking and writing, the degree of formality changes greatly.

Discourse Tasks

interviewing
notetaking
news reporting
writing a 'personality piece'
writing up an editorial
editing, in pairs

Degree of Formality

consulting style
intimate/casual style
consulting, newspaper style

casual → consulting newspaper style
consulting/detached style
casual style

Discourse Organization

newspaper discourse patterns: pyramid structure if a news story (see key visual) catchy caption, 'hook' lead-in, opinionated commentary, and neat sum-up if a feature piece on a personality

MATERIALS

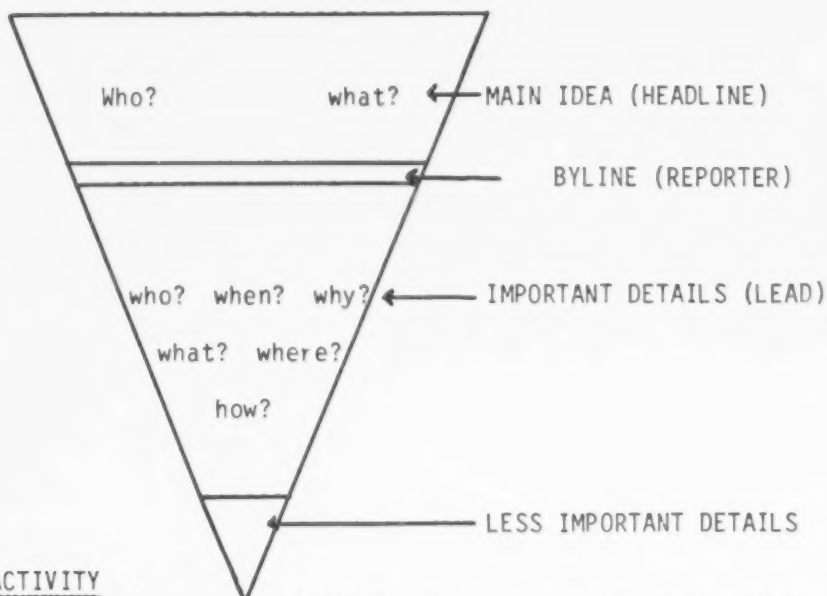
sample news stories which report information gained via interviews
paper for rough draft and final copy
art paper and supplies
tape recorders and cassettes

resources

guest

MATERIALS (Continued)

Key visual format for news story - headline, byline, pyramid structure



ACTIVITY

- Teacher reads aloud news story or sports story which reports information from interviewed parties.
- Class discusses news-gathering techniques.
- The teacher and the class choose a guest they would like to interview.
- Invite the guest. Preferably, it would be the students' responsibility to phone or make personal or written contact with the guest. Confirm the time of interview in writing.
- Discuss the topics the guest could talk about.
- Discuss questioning techniques - use of polite forms - indirect approaches to sensitive issues, etc.
- Pair the students and have each student write up a minimum of four good relevant questions to ask of the guest.
- Have the students practise asking their questions with their partner.
- Have the students prioritize their questions in terms of which ones they would most like answers to.

INTERVIEWING PROCEDURE

- Explain that they must listen carefully to the questions asked and if another student asks the question they had in mind they should go to the next one on their list.
- Students should be advised to take notes throughout the interview as they will write up the interview after the guest has left.
- Conduct the interview. (Tape the interview with the guest's permission. Use more than one tape recorder so that several students can check the tapes for quotes.)
- After the guest has gone, students arrange their notes and write their first draft. They will need to consider the 5 W's and H of newspaper reporting: who, what, where, when, why and how.
- The students work in pairs to proofread and edit their interviews.
- Students produce final copy of the interview plus a sketch, caricature or cartoon as an illustration. The artwork must be of a type suitable for newspaper publication.

EVALUATION

Each student rereads one news story and on a separate sheet of paper comments on the accuracy of the quotes, the truthfulness of the statements, and whether the reporter's opinions are identified as such. This evaluation thus involves differentiating between fact and opinion.

UNIT: E.S.L. INSTRUCTION VIA WRITING AND ART

Goal for Two Sample Units

The students will increase their powers of observation by drawing pictures and by making a life-size portrait.

(Note: in these sample units the technical aspect of art instruction is downplayed.)

The students will increase their descriptive language skills and establish some criteria for recognizing good description orally and in writing.

Sample Unit 1

TOPIC

What's My Object?

OBJECTIVES

Thinking Process
describing

hypothesizing

hypothesizing
forming personal
opinions
evaluating

deciding

evaluating
describing, proposing
alternatives

solving problems

Knowledge and Skills

Students will describe a treasured object without naming it.

Students will draw their guess of a described object.

Students will read clues aloud and ask class to guess.

Student originators will confirm or deny guess.

Students will match drawings and descriptions in a display.

Students will evaluate the matches.

Students will phrase new descriptive sentences.

Attitudes and Values

Students will demonstrate a willingness to take turns.

Students will show respect for the opinions of others.

Students will demonstrate the ability to disagree in an acceptable manner.

Feelings

Students will explore memories and feelings associated with objects.

LANGUAGE SKILLS

Degree of Formality

informal/formal: casual → consulting

Discourse Tasks

describing orally and in writing, guessing orally, agreeing/disagreeing orally, synthesizing orally and in writing, sharing memories and feelings orally and in writing

Structures

It is _____, On the front _____, This is a good clue because _____, I think it is _____, It must be _____.

Vocabulary

terms to describe object
See Key Visual.

MATERIALS

Supplies/resources

small squares of drawing paper
writing paper
art paper and supplies
display space
display paper such as butcher block coloured paper from rolls

Key Visual

My Favourite Object

Clues:

form, shape _____

colour _____

size _____

It is made of _____.

It is used for _____.

It makes me feel _____.

(optional)-----→

ACTIVITIES

1. The teacher tells class about an object (in the classroom) and leads a discussion of how to describe it without naming it. (See Key Visual.)
2. The teacher, with suggestions from students, writes 5 clues on board in sentence form.
3. Students are each given a small sheet of drawing paper and asked to draw what they think the object is.

If they cannot guess, they draw a question mark and decorate it or write terms such as "I don't know." "I can't guess." "I give up."
4. Students share their drawings and their guesses with the class and the teacher confirms or denies.

ACTIVITIES (Continued)

5. For homework each student chooses a favourite object and writes 5 clue sentences to describe it without naming it. Students use Key Visual as a guide. Students maintain secrecy about their objects and do not write their names on their clues.
6. Next day the teacher collects papers and redistributes a different paper to each student.
7. Each student on a small square of drawing paper draws a picture of what they think the object is, using the descriptive clues.
8. Each student reads clues aloud and asks class to guess the object.
9. The student then shows class his/her drawing and shares his/her guess.
10. The student originator confirms or denies the guesses by naming his/her chosen object.
11. When all the objects have been guessed, students match drawings to clues on display board. (This activity could take the form of a game if desired.)

EVALUATION (follow up)

12. In small groups, students decide on the best object/description match writing down 3 reasons for their choice.
13. In the whole class group, students share their criteria for good descriptive sentences. These are written on board for reference.
14. The teacher shows the class a favourite object and asks the class to describe it. Vocabulary is written on board.
15. The class is divided into small groups and each group is given a small chalk board on which to write a description of the object.
16. Descriptions read aloud are compared and contrasted.
17. Students choose the best sentences for a composite class description which is added to the display.

EXTENSION

Students may want to bring favourite objects from home to continue this unit. This would provide opportunities for cultural sharing as well as practice in writing descriptions. A weekly bulletin board feature What is it? with a description could keep interest stimulated.

UNIT: E.S.L. INSTRUCTION VIA WRITING AND ART (Continued)

Sample Unit 2

TOPIC

Self-Portrait

OBJECTIVES

Thinking Process

observing
identifying
describing

describing

classifying
describing
evaluating
describing

solving problems

Knowledge and Skills

Students will make a life-size portrait.
Students will identify and use terms describing people's physical attributes and clothing.

Students will write a short description of themselves using the self-portrait as a guide.

Students will describe pictures of famous people using a key visual chart.

Students will discuss the effectiveness of the descriptions and then will make new descriptions for another person.

Attitudes and Values

Students will demonstrate a willingness to work cooperatively.

Students will show respect for the opinions and work of others.

Students will demonstrate the ability to criticize constructively.

LANGUAGE SKILLS

Degree of Formality

informal: casual → consulting

Discourse Tasks

labelling orally
describing in writing, general to specific
expressing personal opinions
making judgements about descriptions

Structures

Unlike my brother, I am tall and thin.
My eyes are as blue as the sea.
I wear glasses but my sister Gracia does not.
I am wearing blue jeans and sneakers.
I think I'm a neat looking kid.

Vocabulary

parts of body
words for describing people
build - tall, short, slim
features - blue eyes, round face
distinctive characteristics - glasses,
braids, long legs
words for describing clothing
items - pants, shirt, jeans
colour - red, blue
special features - striped, pleated, camouflaged, tie dyed

MATERIALS

Supplies/resources

mirror
butcher paper
crayons, paint washes, scissors
paper for rough and final drafts
display space and mounting paper

On pieces of standard sized construction paper, mount pictures of famous people such as Princess Diana, Michael Jackson, Steve Fonyo, etc. These can be displayed on a large display sheet or bulletin board but need to be removable for students to use.

Key Visual

Description Chart
Build-
Features-
Distinctive characteristics-
Clothing-
Concluding Sentences

ACTIVITIES

1. Students arrange themselves in pairs.
2. Students brainstorm parts of body. (Teacher records list on black-board.)
3. One partner lies on length of butcher paper while other partner traces outline.
4. Partners exchange roles.
5. Students draw in hair, face, distinguishing characteristics. Students colour with crayon and paintwash or watercolour. Students cut out shape.
6. Students brainstorm and record on board vocabulary to describe physical attributes and clothing. Students write a self-portrait to accompany the drawing using the Key Visual as guide.
7. Student partners work together to edit and proofread each other's work.
8. Students display portraits and descriptions.

EVALUATION
(follow-up)

Students in pairs choose a picture of a famous person e.g. Michael Jackson, Gaetan Boucher, Sylvie Bernier, Rick Hansen.

Students are given a blank key visual to fill in for their pictures.

The teacher displays the pictures and key visuals at the front of the classroom.

Students discuss the effectiveness of the descriptive words.

Pairs of students are given a different picture with the matching key visual.

Each pair writes 5 descriptive sentences for display with the picture.

EXTENSION

Students could choose other people to describe e.g.

- family members
- the strangest looking person I have seen, or
- my dream girl/boy.

UNITS: E.S.L. INSTRUCTION VIA SOCIAL STUDIES

TOPIC

Families Share

FOUR UNITS

GOAL

Students will develop an understanding that family members help each other, and have roles and responsibilities.

MAJOR REFERENCE

Explorations: Teacher Book for Grade 1
resources pp.59-60; sample unit pp.93-104

UNIT 1

TOPIC

Family Members and Tasks

OBJECTIVES

Thinking Process

identifying
classifying
contrasting

comparing
contrasting
generalizing
evaluating

evaluating

Knowledge and Skills

Students will identify household tasks done by children and adult family members.

Attitudes and Values

Students will become aware that children in other places help their families by doing small jobs.

Students will begin to appreciate the roles played by members of their families.
Students will become aware that family cooperation is possible and necessary.

LANGUAGE SKILLS

Degree of Formality

informal: casual → consulting

Discourse Tasks

listening to a film documentary
describing mimed actions
dictating descriptions for drawings of actions and reading the descriptions
question/answer dialogues: comparing and contrasting
discussing social studies book picturing household jobs
role-playing cooperation during the sharing of a task

(optional)

LANGUAGE SKILLS (Continued)

Discourse Tasks

listening to a story
discussing and writing up comparisons and contrasts

Structures

What is s/he doing?
What are they doing?
What does s/he do?
What do they do?
Do you have any _____?
Answers use verbs in the present progressive:
s/he is _____ing.
or the simple present: s/he _____(e)s.

Vocabulary

brother, sister, mother, father, parents,
grandfather, grandmother, family, aunt,
uncle; cook, set, feed, wash, clean, paint,
sweep, take care of, make, open, help (plus
other verbs of action that emerge in student
responses)
jobs, chores, tasks

MATERIALS

Key Visuals

Family Tree - from previous units on display,
see p.169 photograph
Families: Helping Out Family Series from
Churchill.
1 film reel, 15 min. colour 1976
Film/videotape formats may be ordered from
PEMC.
A "Helping Out" filmstrip is also available.

Explorations: Families Share booklet pp.6-7
charts: "In (David's, Hiroyuki's, Candida's)
House"
"In My House" - refer to Student
Activity

References

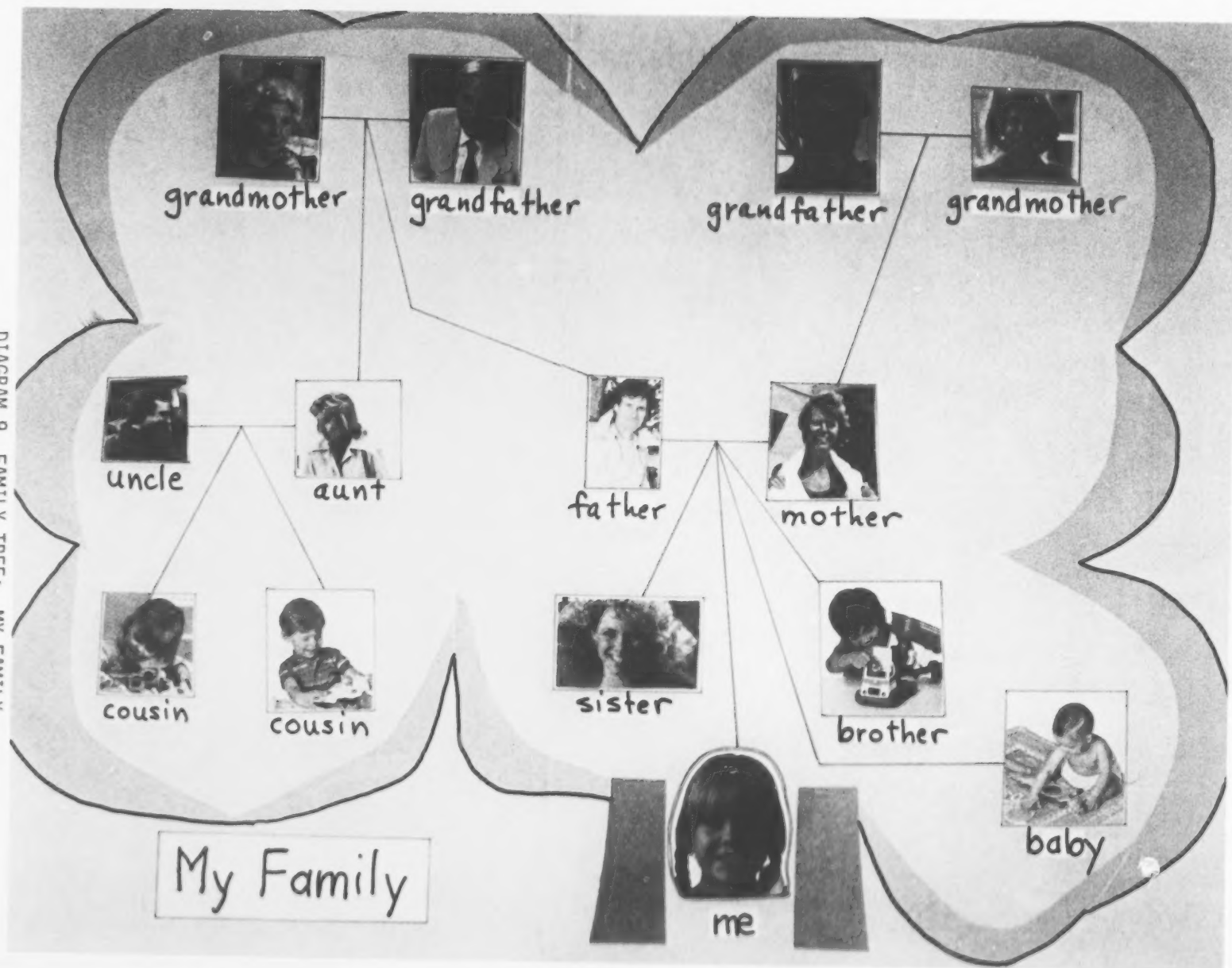
Explorations: Teacher Book Grade 1
Social Studies Media Resources Grade One-
Grade Three pp.19-21 provides an overview of
the film, learning objectives, suggested
objectives, suggested activities and a
program log

Resources

Consult with the school librarian to find a
storybook which treats of a family from a
culture not represented in the class. The
storybook should illustrate how that family
apportions its responsibilities.

DIAGRAM 9 FAMILY TREE: MY FAMILY

-169-



TEACHER ACTIVITY	STUDENT ACTIVITY
1 <u>Show Families: Helping Out</u> in 3 steps. The film/videotape/filmstrip portrays the roles and responsibilities of an American, a Japanese, and a Mexican child. To help the students recall and discuss the film, the teacher mimes one job that each child does in the film e.g. David from San Francisco cleans his room feeds the dog paints the garage door e.g. Hiroyuki from Tokyo opens the shutters plays piano lessons mails a letter e.g. Candida from Chiapas cooks runs errands washes clothes, washes rice Have the students mime the jobs and identify the jobs. Request the students to draw on art paper two jobs of one of the film children and two jobs of the parents.	<u>viewing and listening</u> <u>viewing mime so that they will understand the instructions the teacher gives for role-playing in the future</u> <u>miming, identifying and describing</u> <u>drawing and dictating</u>
2 <u>Share the students' artwork and review the jobs done by the children in the other countries.</u> Display the artwork for future reference.	<u>comparing and contrasting orally</u>

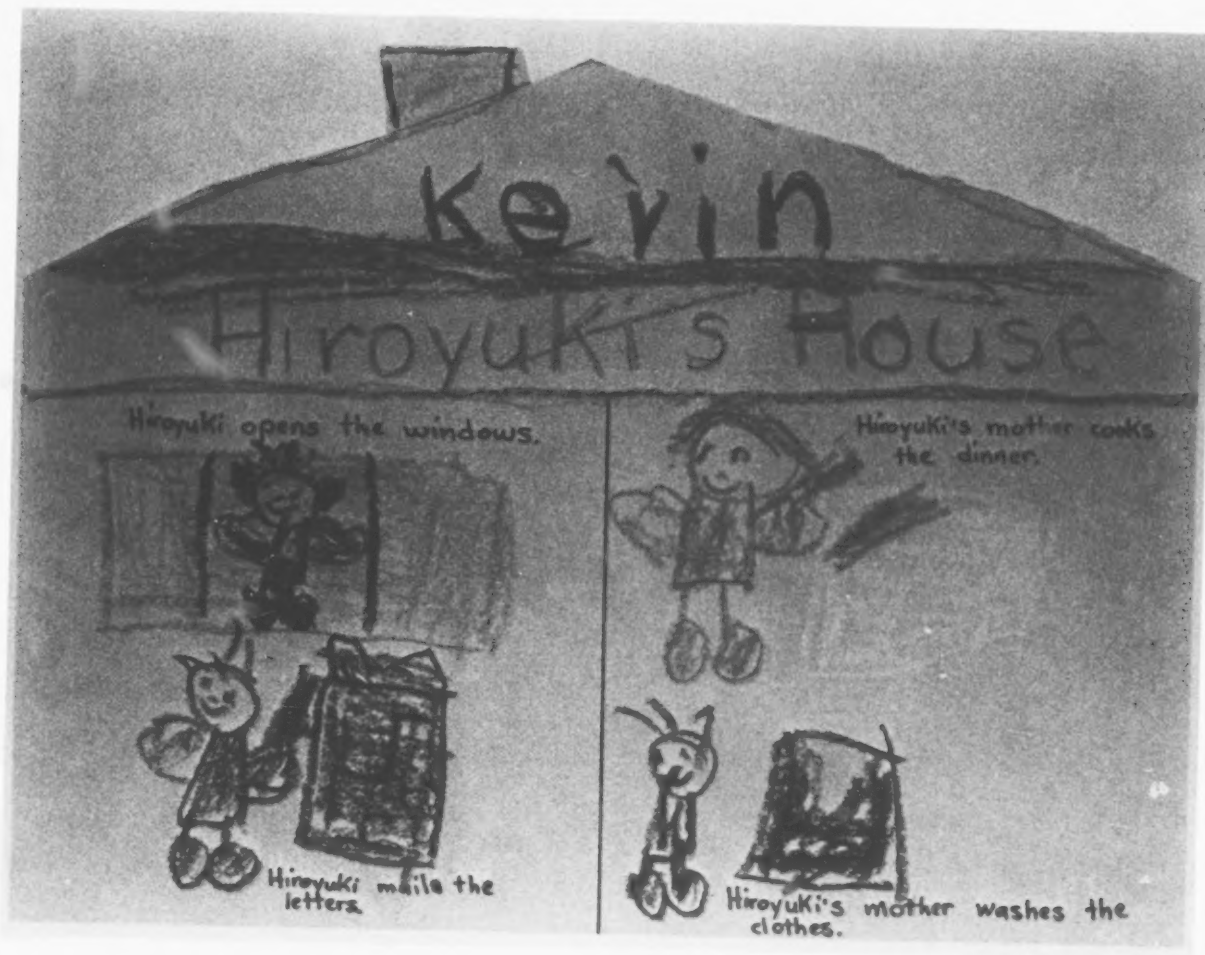


DIAGRAM TO CHART: HIROYUKI'S HOUSE

TEACHER ACTIVITY

- 3 Read pp.6 & 7 Families Share.
Ask questions to stimulate discussion e.g.
 What is the boy doing?
 What is the girl doing?
 What do you do to help your family?
 What does your mother do to help your family?
 What does your father do to help your family?
 Do you have any brothers/sisters?
 What do they do to help your family?
 Do you have any aunts or uncles?
 What do they do to help the family?
 Do you have grandparents?
 What do they do to help the family?

- 4 Recall the pictures from Families Share by having students mime the actions.
 "Show us these jobs:
 sweeping the floor
 setting the table
 feeding the pet
 holding the baby
 cleaning the bathroom
 making the bed..."
 Have them describe the actions.

- 5 Direct the students to think about the chores in their house.
Discuss the things the children do and the things the adults do.
 Direct the children to make individual charts entitled "In My House".
 Help with spelling & unknown vocabulary on an individual basis or record the students' dictation for them.

Listen and comment.

STUDENT ACTIVITY

Listening to the teacher
answering & discussing questions

(setting the table, feeding the gerbil, cleaning the bathtub)
 (sweeping the floor, holding the baby, making the bed)

miming

describing

discussing informally
practising turn-taking techniques

writing up individual charts
 (Key Visuals)

IN MY HOUSE	
The Children set the table wash the dishes take out the garbage	The Adults cook the food vacuum wash the windows

Upon completion, the students read out one or two sample sentences from their chart e.g. In my house the children wash the dishes and the adults cook the food.

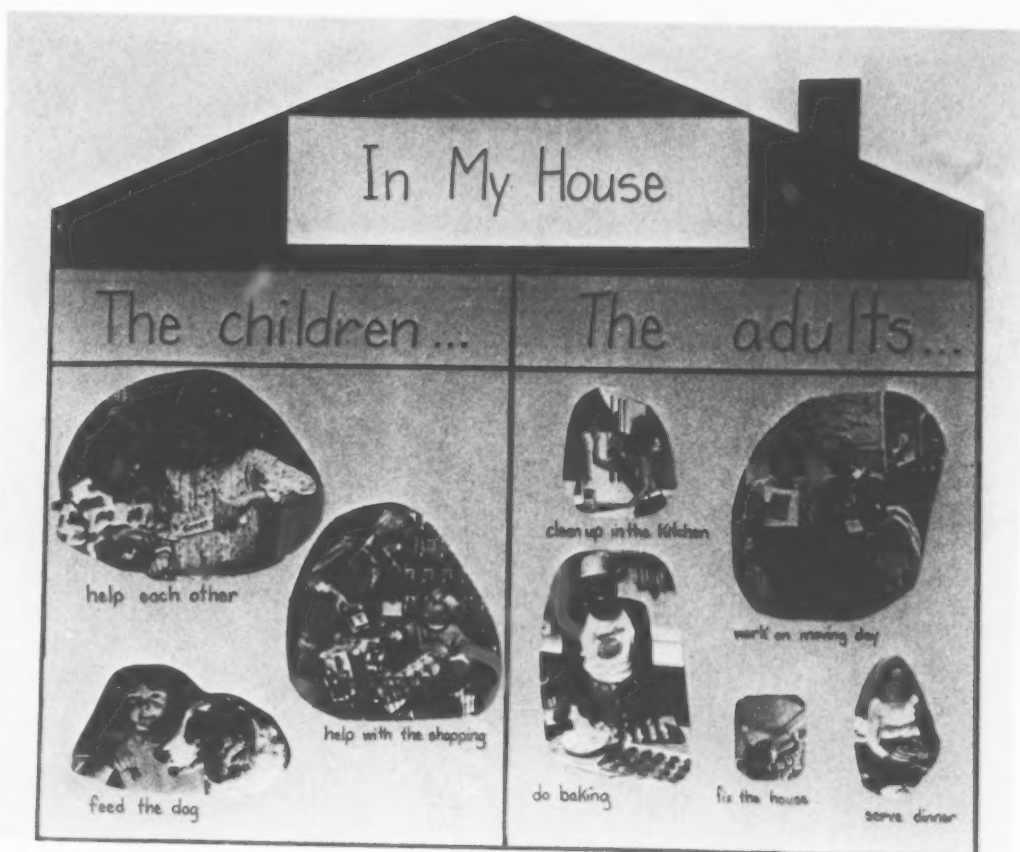


DIAGRAM 11 CHART: IN MY HOUSE

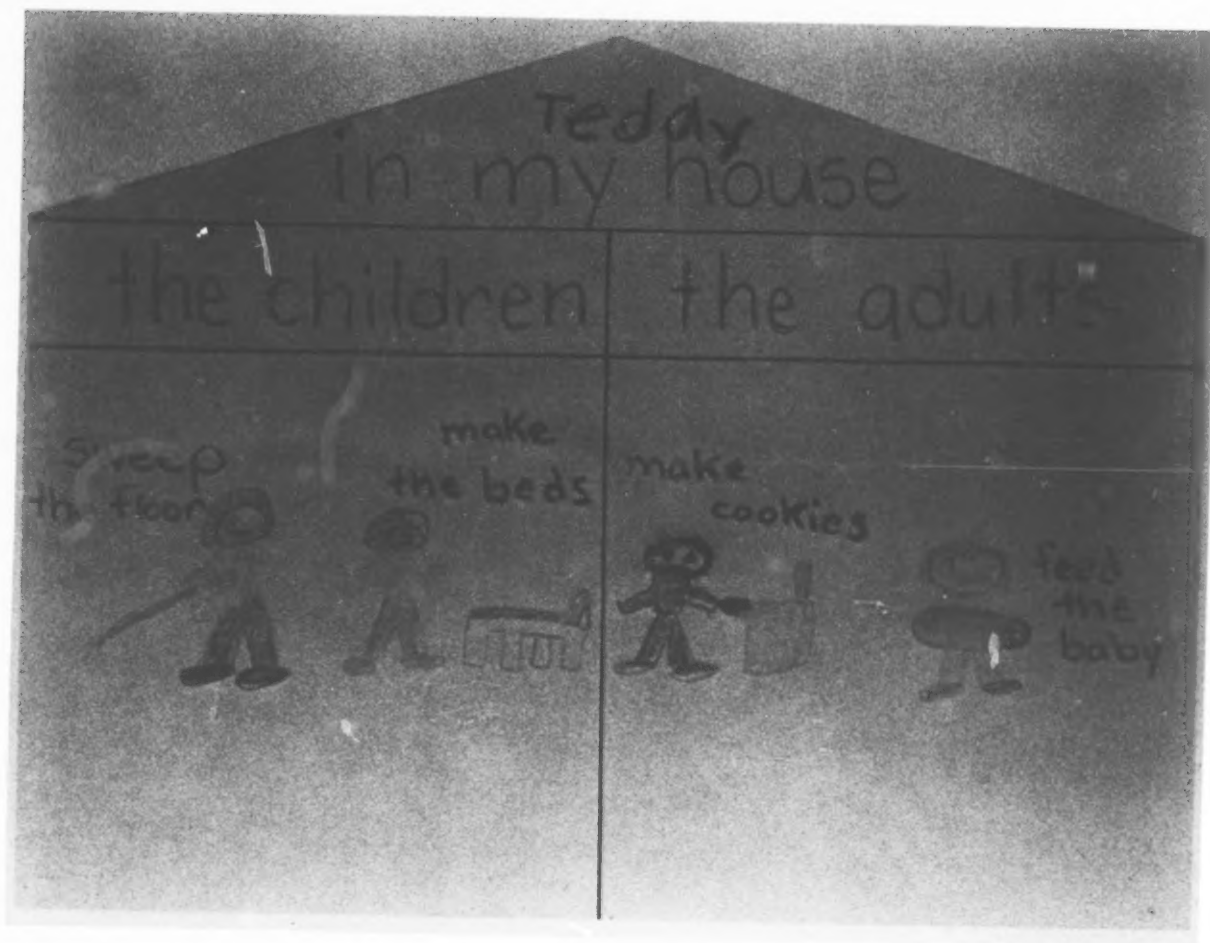


DIAGRAM 12 CHART: IN MY HOUSE
(BY TEDDY)

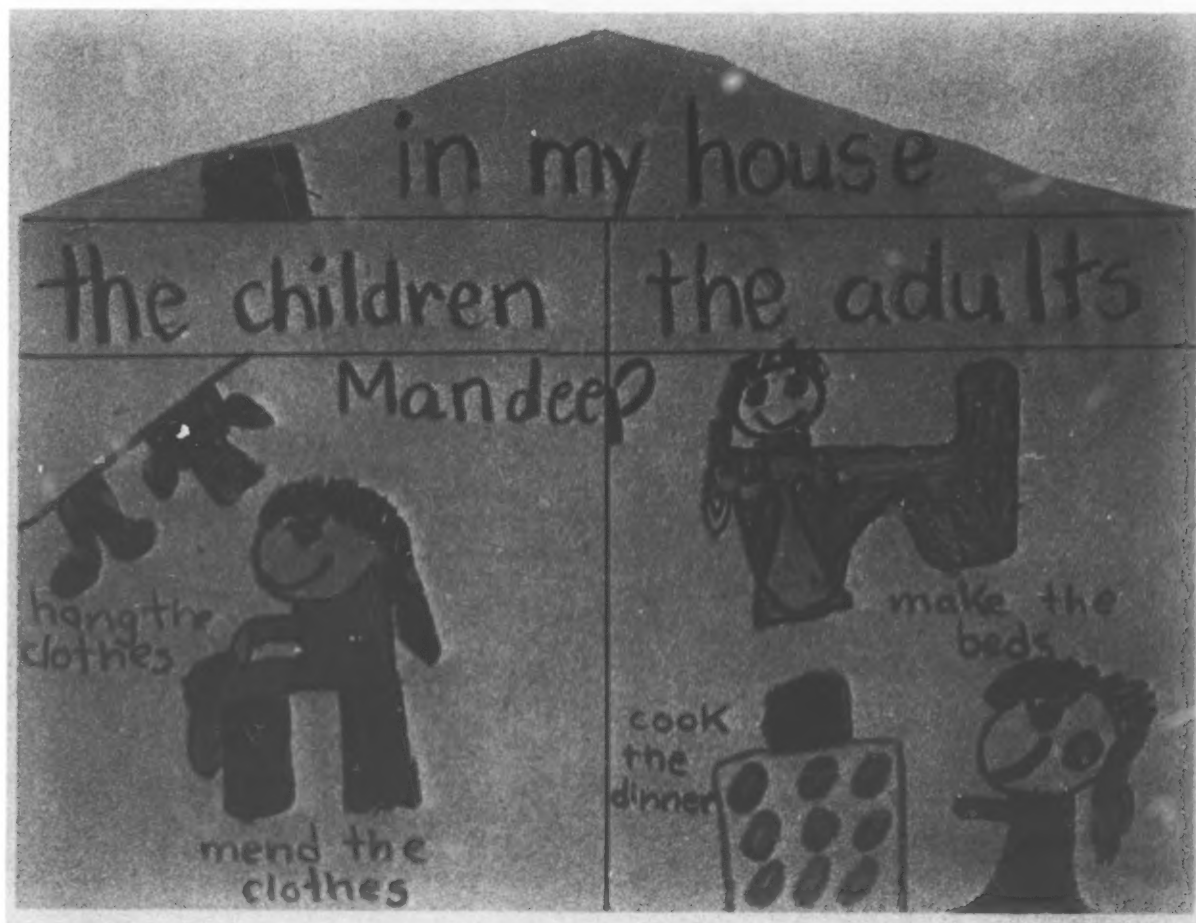


DIAGRAM 13 CHART: IN MY HOUSE
(BY MANDEEP)

TEACHER ACTIVITY	STUDENT ACTIVITY				
5 (Continued) Have the students write a simple concluding sentence at the bottom of the chart.	<u>writing up generalizations e.g.</u> In my house the children and the adults share the work. In my house the adults do more work than the children. Etc.				
6 EXTENSION Have the students choose one job around the house and role-play how this could be shared by two people. e.g. Two can make the beds. Two can carry the suitcase. OR Role-play If you visited David or Candida or Hiroyuki's house, how could you help them do their jobs? Think about helping them. Show me how you could help them.	<u>role-playing</u>				
7 EVALUATION Read or tell a story about a family from a culture not represented in the class. Choose a story that describes the child and adult responsibilities in that family. <u>Discuss these responsibilities with the class and compile a chart with them.</u>	<u>listening to a story</u>				
<table border="1"> <tr> <th colspan="2">In the House of (Child's Name)</th></tr> <tr> <td>Children</td><td>Adults</td></tr> </table>	In the House of (Child's Name)		Children	Adults	<u>discussing the family's jobs</u>
In the House of (Child's Name)					
Children	Adults				
Ask the students to compare or contrast the group chart with their individual charts "In My House".	<u>orally comparing contrasting charts</u> <u>writing 2 sentences comparing or contrasting the 2 charts</u> e.g. "Demetrius looks after his brother and I look after my brother."				

UNIT: E.S.L. INSTRUCTION VIA SOCIAL STUDIES

UNIT 2

TOPIC

Family Roles

OBJECTIVES

Thinking Process

observing
identifying
describing
cause/effect reasoning
describing
comparing/contrasting
classifying/generalizing
describing
classifying
describing

describing

identifying

describing

evaluating

forming principles

evaluating

Knowledge and Skills

Students will demonstrate an understanding that people in a family do jobs to satisfy family needs.

They will do so by

1) talking about key visuals depicting family members performing household tasks

2) discussing the jobs that fathers and mothers do inside and outside the home

3) illustrating and labelling family role charts

4) listening to a parent describe his/her jobs

5) writing a short report on the parent's talk. (Sentence frames could help make this an appropriate task for Grade 1 students.)
Students will develop a concept of themselves in relation to their families.

They will do so by

1) recalling the labels of family members

2) identifying who they are and what they do to help their families

Attitudes and Values

Students will begin to appreciate the roles played by family members.

Students will show an awareness of acceptable social conventions.

They will do so by

1) listening to the parent and interviewing him/her politely

2) writing a thank you letter to the parent

Students will judge the merits of the student reports and choose the one that is to be printed.

LANGUAGE SKILLS

Degree of Formality

Discourse Tasks

informal: casual → consulting

reading original charts

"In My House"

discussing social studies

book picturing family members

working in and out of the home

(listening to two story poems

(discussing them

brainstorming a list of jobs that
a family member does

labelling a family role chart

interviewing and listening to a
guest speaker

completing a written thank you
letter

writing up a report on the guest's
talk

discussing the merits of the
reports

Structures

What is s/he doing?

What are they doing?

What does s/he do?

What do they do?

How does s/he help his family?

How do they help her family?

+interrogative structures for
questioning guest...

Do you like your work?

What do you do?

Terms of comparison and contrast
e.g. same, different, more, less,
better, worse.

Cause and effect e.g.

If he does this then ____.

Because he does this ____.

Mr./Mrs. ____ talked to us about
his/her job.

Mr. ____ visited us.

He does ____ at work.

He does ____ at home.

He works hard.

Vocabulary

vacuum cleaner, dish, printer,
food, refrigerator, office,
telephone

type, clean, wash, dry, work, cook,
answer, talk, change

MATERIALS

Key Visuals

Explorations: Families Share

booklet pp.8-9

family role chart "My Mum" - refer to Student Activity

letter format - not given here

For E.S.L. students the letter would be in a cloze format with only a few blanks left to be filled in.

What Fathers Do

What Mothers Do

by Betty Clare Moffat.

Edu-Media, Kitchener, Ontario, 1980.

Two softcover 16-page books from the Discovery Books series.

Parent/guest speaker

Books

Resources

TEACHER ACTIVITY	STUDENT ACTIVITY
1. Optional: Review charts from last unit - "In My House". Read pp.8-9 of <u>Families Share</u>.	<u>reading</u> the charts <u>listening</u> to the teacher
<u>Ask questions to stimulate discussion</u> e.g. What is the man doing? What is the woman doing? How does he help his family? How does she help her family?	<u>answering</u> and <u>discussing</u> questions
2. Review pp.8-9 by having the students point to these depictions: vacuuming preparing food working in a shop putting away groceries working in an office changing a tire	<u>reviewing</u> vocabulary: <u>showing</u> comprehension
3. Read <u>What Fathers Do</u> and <u>What Mothers Do</u>. These two books have <u>colourful</u> photographs; the brief rhyming text shows that fathers and mothers do different jobs in different places. <u>Discuss</u> the story e.g. What do mothers do? What do fathers do? How do the jobs help the family? Are they the same? Are they different?	<u>listening</u> to the story poems <u>discussing</u> informally

TEACHER ACTIVITY	STUDENT ACTIVITY
4. Review the story, then have the students think of one member of their family. Have them think of the jobs that person does to help the family. <u>Instruct the students to fold a rectangular sheet of paper twice to divide it into 4 sections and then to draw pictures of the person doing the jobs.</u> OR Have each student draw a picture of the person helping the family. The teacher captions each drawing using the student's dictation, and produces a circle chart as in the sample, on page 181.	<u>illustrating and labelling the family role chart</u> <u>Key Visual</u>
5. Invite a parent into the classroom to tell about his or her different roles as a family member. Have the parent describe his or her jobs away from home, in the home, in the yard. 6. Have the students acknowledge the visit by writing a class thank you letter. Introduce key visual of letter format on chart. (Format is not provided here.)	<u>listening to a guest speaker</u> <u>asking questions of an unfamiliar person</u> <u>writing a thank you letter where the students only need to contribute a few words on their own</u>

EVALUATION

(suitable for students beyond the first grade)

Students write a short report of the guest's talk for the school bulletin.

Finished work is handed in without names attached.

Class chooses an editorial board of three students to select the best three reports.

Editorial Board reads the three reports.

Students discuss the merits of the reports.

Students vote individually to determine the choice.



DIAGRAM 14 CHART: MY MOM

UNIT: E.S.L. INSTRUCTION VIA SOCIAL STUDIES

UNIT 3

TOPIC

Exploring Occupations

OBJECTIVES

Thinking Process

identifying
describing
classifying

deciding
forming/expressing
personal opinions

identifying
describing
classifying
identifying
describing

cause and effect
reasoning
describing
predicting
cause and effect
reasoning
expressing personal opinions

evaluating

evaluating

LANGUAGE SKILLS

Degree of Formality

Knowledge and Skills

Students will identify occupations performed by family members and others.

Students will show an awareness of the different occupations and consequent lifestyles that people may have.

They will do so by

- 1)choosing and listing 3 jobs they do and do not prefer and giving reasons for their choices
- 2)discussing the variety of jobs mothers may hold

- 3)discussing occupations which involve work away from home, shift work, or unusual hours of work

- 4)describing the lifestyle of someone who has an occupation that is not 9 a.m. to 5 p.m.

Students will match occupations and abilities, by predicting suitable future occupations for each other and giving reasons for their predictions.

Attitudes and Values

Students will appreciate that there are different occupations and consequent life styles.

Students will accept and value differing opinions.

informal: casual————> consulting

LANGUAGE SKILLS (Continued)

Discourse Tasks

discussing social studies
book picturing people working
discussing key visuals of
occupations
listing 3 jobs they would like and
3 they would not
giving reasons for choices
responding to the book
Ask Me What My Mother Does by
expressing personal opinions
*writing a description of a life-
style for an occupation that is
not 9:00 a.m. to 5:00 p.m.
*writing up predictions of future
occupations for each other and
giving reasons for their predict-
ions

*These discourse tasks require advanced abilities: the preliminary activities must be tried before these tasks become feasible.

Structures

What is s/he doing?
What job do(es) _____?
What is s/he doing?
What are they doing?
What does s/he do?
What do they do?
Do you have any _____?
He is a _____.
She is a _____.
What do you think if _____ them?
I like to _____ because _____.
I don't like to _____ because _____.
I _____ would/wouldn't like to _____.
I _____

Vocabulary

names of occupations and workplaces
+responsible, responsibility,
rules, duty, respect
shiftwork, life

MATERIALS

Key Visuals

Explorations: Families Share

pp.10-11

a set of pictures of people working at different occupations

Owen, Edward E.

One World/The Family: Discussion

Picture Programme for Elementary

Social Studies Year 1 (4 sets of

picture cards, guide)

Toronto: Fitzhenry & Whiteside, 1971

Appropriate cards are: 1A/8; 1B/2, 3,4,15,16,18,19,20,21; 1C/1,6,7,9, 11,12,14,16,18.

Chart of "Jobs I like and I don't like"

Chart: "Could Be"

Book

Ask Me What My Mother Does by

Katherine Leiner.

New York: Franklin Watts, 1978,

47 pp. cloth, illustrated.

TEACHER ACTIVITY

Read pp.10 & 11 of Families Share.

Using pictures of people working
ask questions to stimulate a
discussion of different
occupations. e.g.

What is s/he doing?

What jobs do people in your family do?

What jobs did they do before they came to Canada?

Name all the jobs you can think of.

Write the names of the occupations
the students suggest on the black-
board.

Ask the student to list 3 jobs they
would like to do and 3 jobs they
would not like to do.

STUDENT ACTIVITY

Listening to reading

Labelling the occupations:

waiter, mechanic, paperboy,

engineer, planner

answering questions and informally
discussing occupations

naming

making choices

making two lists

JOBS

I like	I don't like
1.	
2.	
3.	

TEACHER ACTIVITY	STUDENT ACTIVITY
<u>Discuss their choices.</u>	<u>giving reasons for choices</u>
<u>Read Katherine Leiner's Ask Me What My Mother Does.</u>	<u>listening</u>
The text describes the jobs of 17 working mothers. The jobs include some uncommon ones like steeple-jill, crossing guard and copy-writer. It has black and white photos.	
<u>Discuss the issues of working mothers.</u>	<u>forming and expressing personal opinions</u>
Using pictures as supports, discuss the issue of people working away from home e.g. flight attendants, fishermen, traindriver, sales-people, etc.	<u>forming and expressing personal opinions</u>
<u>Discuss the issue of shift work e.g. nurses, policemen, mill workers, newspaper workers.</u>	<u>forming and expressing personal opinions</u>
<u>Ask the students to choose an occupation that is not from "9:00 a.m. to 5:00 p.m." and to write a few sentences to describe how their life would be different from that of most people.</u>	<u>choosing</u> <u>writing expressively</u>

EVALUATION

Students in pairs will try to predict a suitable future occupation for each other. Their choices must be supported by at least three good reasons.

The class as a group would compile a large display entitled "Could be".

Philip could be a pilot because he likes planes, he likes excitement, and he is quick.

UNIT: E.S.L. INSTRUCTION VIA SOCIAL STUDIES

UNIT 4

TOPIC

What Makes a Family Work?

OBJECTIVES

Thinking Process

describing
comparing/
contrasting
expressing opinions

expressing opinions
formulating principles
generalizing

evaluating

evaluating

cause/effect
reasoning

LANGUAGE SKILLS

Degree of Formality

Discourse Tasks

Knowledge and Skills

Students will develop the understandings that families need rules so that they can function effectively and that every member can help provide for the family's physical and emotional needs.

They will arrive at these understandings by

1) discussing filmstrips plus cassettes on the roles and rules of different families

2) discussing a set of principles for families to live by in small groups with the whole class at home back in class

Attitudes and Values

Students will consider differing opinions before making decisions.

Students will respect their own opinions as well as those of others.

Students will become aware of the values which underlie principles.

formal: consulting

listening to cassettes which accompany a filmstrip

discussing roles and rules of different families and how members can help look after a family's physical and emotional needs

in small groups

discussing/arguing, generating, and recording a set of principles for families to live by

LANGUAGE SKILLS (Continued)

Structures

Vocabulary

MATERIALS

Key Visuals

with whole class
talking over principles to reach
a consensus
at home
interviewing, and discussing
principles
at school
reporting back about principles on
the homefronts

I think that _____.
I believe that _____.

Review from unit 1,2,3.

4 colour filmstrips,
4 cassettes, guide "How Do We Help
Each Other?" "What are Family
Rules?" from
My Family and Me
Visual Education, 1981, 5-7 min.,
suitable for primary and intermed-
iate
These filmstrips describe the roles
and rules of different families
and show how everyone can help
provide for a family's physical
and emotional needs.

TEACHER ACTIVITY	STUDENT ACTIVITY
Show filmstrips " <u>How Do We Help Each Other?</u> " and " <u>What Are Family Rules?</u> "	<u>Listening and viewing</u>
Discuss contents in general terms. Divide the students into pairs or groups of three and have them in the groups reach consensus on a set of principles they think families should live by e.g. Everyone has to do their share. Sometimes you do someone else's job for them. Family members should <u>respect</u> one another.	discussing <u>generating & recording a set of principles</u> for families to live by orally reporting the completed <u>principles</u> group by group

<u>TEACHER ACTIVITY (Continued)</u>	<u>STUDENT ACTIVITY</u>
<u>Act as facilitator</u> to see which rules all the groups have in common, which important rules may have been missed by some group.	
Have the students take home their list of principles and discuss them with someone else in the family and report back to the class next day.	deciding on a class set of principles for families to live by discussing principles at home and reporting back next day

EVALUATION

If the students can discuss openly and freely the underlying principles of family cohesiveness and cooperation even when the family structures are different, they will have reached the objectives set out at the beginning of this lesson and the goal for the entire set of units.